Soundings

American Cetacean Society ~ Monterey Bay Chapter **January 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)

Date: Thursday, January 25th, 2001

Time: 7:30 p.m.

Eschrichtius robustus

Speaker: Kim Shelden, National Marine Mammal Laboratory, NOAA/NMFS, Seattle

Title: Migration Timing and Mortality in Gray Whales: have there been changes in recent years?

Analysis of the census data for Gray whales seems to indicate a shift in timing during their southward migration along the Central California Coast. This shift occurred late in the 1970s, representing a one week delay in a migration which in all other respects is extremely consistent. In the past two years there has also been an increase in reported mortalities during the winter and in the course of the northward migration along the West Coast.

Our speaker is a leading participant in the current census of southbound Grays at the Granite Canyon facility, south of Carmel. She will discuss these topics and be available to answer questions. This is for us a rare opportunity to hear from one of the Seattle-based government team of cetacean biologists.

FROM THE EDITOR, Tony Lorenz

Happy New Year ACS Monterey Bay Members!

The southward migration of the Pacific Gray Whale has begun with January bringing the greatest number of Gray Whale sightings! We've got the ACS Gray Whale Fund-raising Cruise on January 15 which should coincide with the peak of the southward migration. We have a fascinating Gray Whale presentation scheduled for our regular meeting on January 25. But did you know that as of January 4, 2001, there are still Blue Whales in the Monterey Bay?

The first Blue Whale sighting of the season in Monterey Bay occurred on May 25, 2000. The second Blue Whale sighting occurred on June 16, 2000, a sighting which marked the beginning of the most prolific sighting and protracted feeding season ever recorded in Monterey Bay.

Blue Whales (*Balaenoptera musculus*) represent the largest animals ever to exist in the history of life on earth (3.8 billion years). They can attain a length of 100 feet or more, and weigh upwards of 160-200 tons. A Blue Whale's tongue, at 6 tons, weighs more than an African Elephant!

The California-Mexico Blue Whale population is the largest, healthiest population in the world currently numbering between 2,000 and 2,200 individuals. A significant number of that population spent this past summer and fall feeding in the Monterey Bay. A clearer picture of the exact number of individually identified Blue Whales will be made possible when marine biologist Nancy Black and Captain Richard Ternullo of Monterey Bay Whalewatch provide to the Cascadia Research team the photo identification slides and video footage which they compiled this season. From July 6 through October 31 Monterey Bay Whalewatch went on 114 whale watching trips and observed Blue Whales on 107 on those trips - an amazing 94% success rate. Whale watchers on some trips observed as many as 35 Blue Whales in one outing.

On a typical summer or fall whale watching trip the Blue Whales were a mere 45-75 minute journey from the Monterey Harbor, making the Monterey Bay Blue Whales the most easily accessible Blue Whales in the world. Blue Whale sightings left me and thousands of others in a totally sublime state of mind , realizing that we were just in the presence of evolution's greatest manifestation. People from around the world including England, Denmark, Germany, France and Australia came to Monterey to see the mighty Blue Whale for the first time and went home with fairytale-like stories. And it happened here in our own backyard.

The magnificent sightings of Blue Whales in Monterey Bay make it abundantly clear that we must treasure and safeguard our Marine Sanctuary as diligently as possible. Each and every one of us has a part to play in contributing to that goal.

7th International ACS Conference in Monterey a Great Success

As many of you are aware, the 7th International Conference of the American Cetacean Society took place in Monterey on November 17 - 19, 2000. Almost 300 people from around world attended the conference to immerse themselves in cetacean study and culture, make new friends and contacts and learn the latest news about earth's mightiest creatures.

Many conference participants kicked-off the weekend by touring the Elkhorn Slough with Elkhorn Slough Safari, kayaking Monterey Bay with Monterey Bay Kayaks, or whale watching along the coast with Monterey Bay Whale Watch.

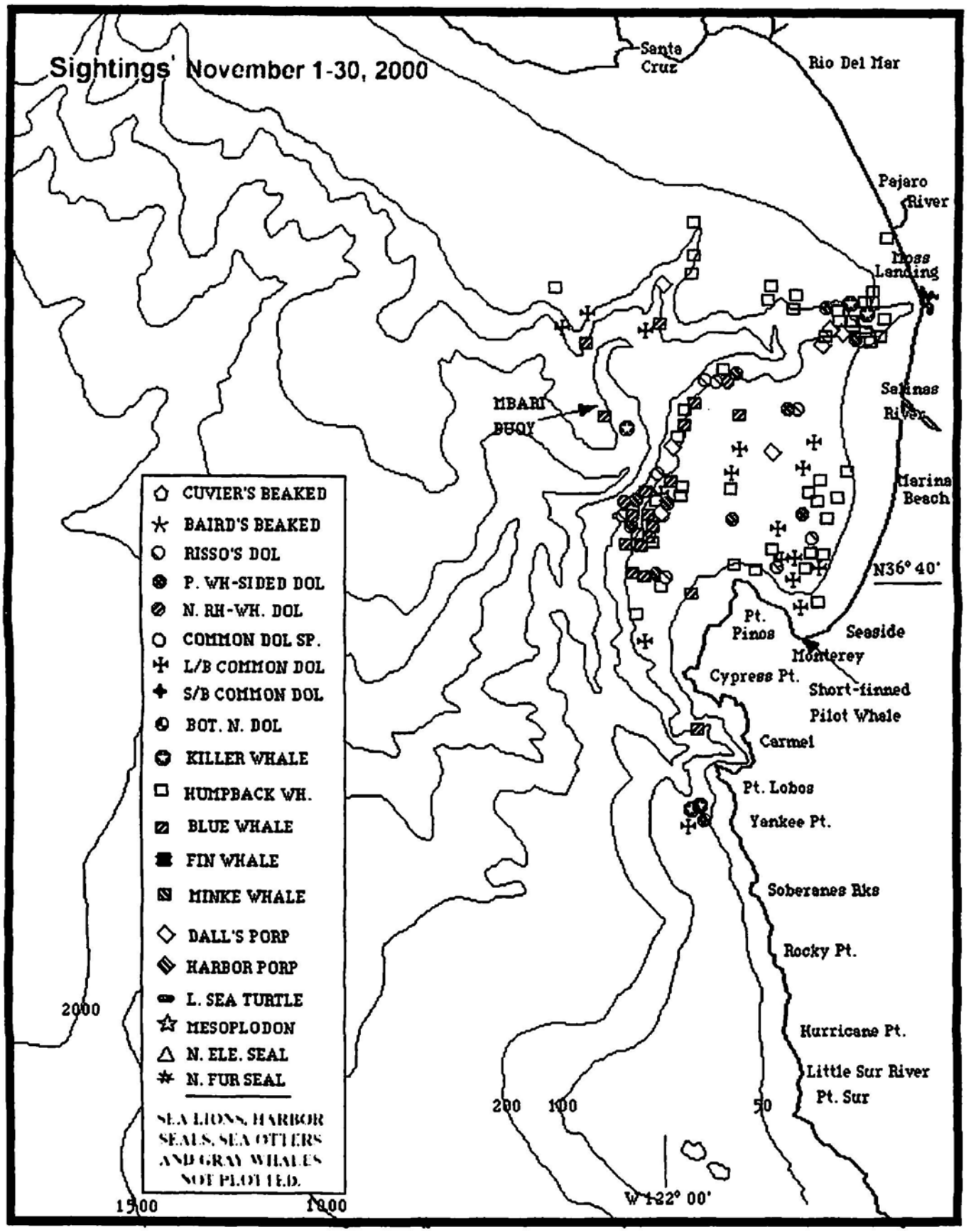
The opening night reception in honor of Alan and Sheila Baldrige held at the Monterey Bay Aquarium was well attended and enjoyed by all with many warm stories being recounted about the Alan and Sheila Baldridge, their respective and joint contributions to learning and conservation, and their love of nature, especially birds and cetaceans. In recognition of their significant contributions and the many lives they have touched Alan and Sheila were presented with an elegant Spinner Dolphin sculpture by artist Randy Puckett.

The more than 15 different plenary sessions in categories such as Hot Issues in Whale Conservation, Legislative Issues in Whale Conservation, Advances in Marine Mammal Science and the Future of Whaling and Whale Management featured notable speakers from around the world, including Wil Burns, Phil Clapham, Doland Croll, Roger Gentry, Bill Hess, Michael Jasny, Thomas Jefferson, Jon Lien, Bruce Mate, David Mattila, Charles Moore, Mark Ormas, Steve Palumbi, Brenda Peterson, John Potter, Naomi Rose, Peter Ross, Karen Steuer, Lindy Weilgart, Norbert Wu, Bernd Würsig. Participants were excited by new data and discoveries, moved by stories of cetacean encounters, and sobered by the substantial work which is ongoing to study, conserve and protect Cetacea.

"The conference was a resounding success in a spectacular location. We're already looking forward to the next conference in 2002!" said Katy Penland, President of ACS National. The next conference will be in Seattle, Washington, in 2002 -- check back with the local or national ACS website for dates to mark your calendar.

Conference Goodies

Please note that we have some t-shirts and tote bags left over from the ACS Conference, and we will be selling them at the meetings **at a discount** -- great post-Christmas presents for yourself and everyone you know! Contact Judy Hubbard at email: jahubbard@ucdavis.edu if you are interested and cannot attend the next ACS meeting.


Sightings November 1-30, 2000
Santa Cruz
Rio Del Mar
Pajaro River
Moss Landing
Salinas River
MBARI BUOY
Marina Beach
N36° 40'
Pt. Pinos
Seaside
Monterey
Cypress Pt.
Short-finned Pilot Whale
Carmel
Pt. Lobos
Yankee Pt.
Soberanes Pts
Rocky Pt.
Hurricane Pt.
Little Sur River
Pt. Sur
2000
200
100
50
W 122° 00'
CUVIER'S BEAKED
BAIRD'S BEAKED
RISSO'S DOL
P. WH-SIDED DOL
N. RH-WH. DOL
COMMON DOL SP.
L/B COMMON DOL
S/B COMMON DOL
BOT. N. DOL
KILLER WHALE
HUMPBACK WH.
BLUE WHALE
FIN WHALE
MINKE WHALE
DALL'S PORP
HARBOR PORP
L. SEA TURTLE
MESOPLODON
N. ELE. SEAL
N. FUR SEAL
SEA LIONS, HARBOR SEALS, SEA OTTERS AND GRAY WHALES NOT PLOTTED.
1500
1000

An unusual reporting period in that Humpback and Blue Whales were present at least to 12/27 in relatively large numbers for this time of year. Blue Whales were feeding along Canyon edges and Humpback Whales were concentrated off Moss Landing feeding on Northern Anchovy although most were gone by the end of December. This pre-migration feeding activity of the Humpback Whales was also associated with "singing", perhaps a warm up by males before migrating to coastal Mexico. As the population of Humpback Whales increases, there is the possibility that over wintering individuals may become more noticeable. Look for the Gray Whale to be seen from shore, and peak in mid January. The biggest news among the toothed whales is the discovery of a recently deceased Short-finned Pilot Whale near Wharf#2. Long-beaked Common Dolphin are an almost daily sight from shore along the Pacific Grove shoreline.

Date	# of animals	Location	Obs
		BLUE WHALE	
There are 29 sightings throughout the Bay of up to 23-30 individuals.			
		HUMPBACK WHALE	
There are 53 sightings of up to 50+ individuals throughout the Bay. 1 found dead near Moss Landing.			
		GRAY WHALE	
Scattered sightings along coast from Pt. Pinos S.			
		KILLER WHALE	
11/17	5	2.5 mi SW Moss Landing	MBW
Killed and ate 1 **CALIFORNIA SEA LION**			
11/19	4	Off Moss Landing	MBW
11/19	4	Carmel Bay	JW
Time frame indicates that these are of two groups.			
11/24	8	2 mi W Yankee Pt.	JW
11/26	1(male)	7 mi NW Pt. Piños	JWi
12/2	5	Off Cypress Pt.	JW
12/3	8-10	5 mi S Santa Cruz	unk.
12/19	3	1.5 mi SW Moss Landing	unk.
		SHORT-FINNED PILOT WHALE	
11/8	1(female)	300mt E Wharf #2	KW
		RISSO'S DOLPHIN	
There are 19 sightings of up to 4000 individuals throughout the Bay and outer waters.			
		BOTTLENOSE DOLPHIN	
12/1	15	Sea Cliff St. Bch.	CW
12/3	7-9	Seascape Bch.	CW
12/7	2	Sea Cliff St. Bch.	CW
12/11	?	Seascape Bch	CW
12/15	1	Sea Cliff St. Bch.	CW
		PACIFIC WHITE-SIDED DOLPHIN	
There are 11 sightings mostly along Canyon edges and throughout the Bay.			

NORTHERN RIGHT WHALE DOLPHIN

11/5	400	6.5 mi NW Pt. Piños	MBW
Associated with 2 **HUMPBACK WHALES** and 1000 **RISSO'S DOLPHIN**.			
11/7	500	4.5 mi WNW Pt. Piños	MBW
11/8	400	4 mi NW Pt. Piños	MBW
Associated with 800 **RISSO'S DOLPHIN**, 100 **PACIFIC WHITE-SIDED DOLPHIN**, and 100 **LONG-BEAKED COMMON DOLPHIN**.			
11/24	300	4 mi WNW Pt. Piños	MBW
Associated with 1000 **RISSO'S DOLPHIN** and 400 **PACIFIC WHITE-SIDED DOLPHIN.**			
11/25	200	4 mi WNW Pt. Piños	MBW
Associated with 1000 **RISSO'S DOLPHIN** and 500 **PACIFIC WHITE-SIDED DOLPHIN.**			
12/5	200	6 mi W Rocky Pt.	HN

LONG-BEAKED COMMON DOLPHIN

There are 25 sightings throughout the Bay of up to 3000 individuals.

DALL'S PORPOISE

11/5	30	3 mi SW Moss Landing	MBW
11/12	10-15	5 mi NW Pt. Piños	MBW
11/14	40-50	3 mi SW Moss Landing	MBW
11/17	6	3 mi W Marina Bch.	MBW
11/17	8-10	6 mi S Santa Cruz	MBW
11/24	6-8	6 mi NW Pt. Piños	MBW

HARBOR PORPOISE

12/3	4(?)	Sea Cliff St. Bch.	CW

NORTHERN ELEPHANT SEAL

11/17	1	3.5 mi W Moss Landing	ACS

CALIFORNIA SEA LION

Many sea lions are hauled out on the breakwater, representing a more "normal year".

PACIFIC HARBOR SEAL

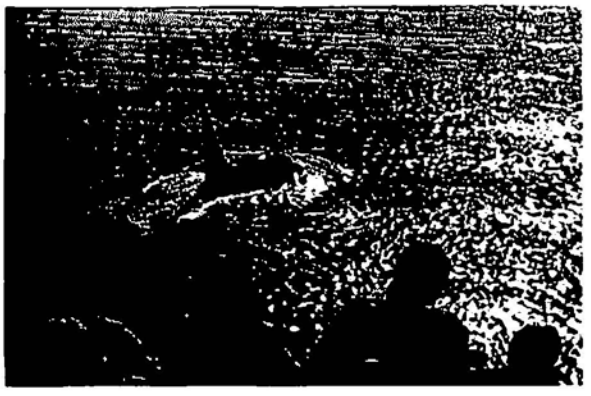
Seen from Monterey Harbor to Pt. Lobos and Elkhorn Slough.

SOUTHERN (CALIFORNIA) SEA OTTER

Seen from Monterey Harbor to Pt. Lobos and Elkhorn Slough.

ACS, ACS National; JW, J. Wetle; MBW, Monterey Bay Whalewatch; HN, H. Neece; CW, C. Walker; KW, K. Whitaker; JWi, J. Williamson

AROUND THE BAY



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ORCA ODYSSEY

On November 17, 2000, Monterey Bay Whale Watch's Sea Wolf II Captained by Richard Ternullo carried more than 40 ACS Conference attendees out on a beautiful calm blue bay. In addition to observing 1,500 long-beaked common dolphin and approximately 40 humpback whales the trip culminated with an extraordinary visit with five Orcas (*Orcinus orca*) preying on California sea lions not far off of Moss Landing. The sea lions themselves were preying on a large school of sardines, and even after temporarily scattering, the sea lions could not resist continuing to feast on the sardines in spite of the danger of becoming a feast themselves. For many on board, including veteran whale watchers, this was the first time they had ever seen Orcas in the wild, much less the active predatory behavior that was witnessed that day. Captain Richard skillfully maneuvered the Sea Wolf II to give passengers the best possible vantage point, including Orcas passing within a few feet of the vessel's bow. Naturalists Nancy Black and Alissa Schulman provided expert narration throughout the journey which enhanced understanding and appreciation for the marine environment and its inhabitants. An unforgettable experience was had by all!

RARE VISITOR: SHORT-FINNED PILOT WHALE

A recently deceased Short-Finned Pilot Whale (*Globicephala macrorhynchus*) was found on Del Monte Beach on November 8, 2000, by ACS Board Member Katherine Whittaker. The whale was transported to Moss Landing Marine Lab where researchers performed a necropsy in an effort to learn more about the life and death of this beautiful sea creature. The Pilot Whale is a rare visitor in Monterey as its range generally extends from Point Conception to Central America. As Pilot whales are highly social animals which are rarely found alone, local whale biologists speculated that other members of this whale's family or community group might be sighted in the vicinty, however, no further sightings of Pilots whales were reported.

ACS Information

The objectives of the American Cetacean Society include engaging in educational, conservation, and scientific pursuits for the purpose of expanding scientific knowledge of whales, dolphins, porpoises, and related creatures. Meetings and activities feature Cetacea and various aspects of the marine environment. The American Cetacean Society is a 501(c)(3) nonprofit corporation. Donations are tax deductible.

MEETINGS: Monterey Bay Chapter of ACS meets the last Thursday of each month (except December) in the Boatworks Building at Hopkins Marine Station, Cabrillo Point, Pacific Grove (across from The American Tin Cannery Shopping Outlets).

Links for Fun and Information:

ACS Monterey Bay Chapter website:
http://www.starrsites.com/acsmb/

ACS National website:
http://www.acsonline.org/

Monterey Bay Whalewatch
http://www.gowhales.com/

International Whaling Commission website:
http://ourworld.compuserve.com/homepages/iwcoffice/

Whale Museum at Friday Harbor, WA
http://www.whale-museum.org/

If you know of a fun or interesting link to a website about anything related to whales let us know.

American Cetacean Society Membership Application

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750
☐ Patron, $500
☐ Contributing, $250
☐ Supporting, $75
☐ Foreign, $45
☐ Family, $45
☐ Active, $35
☐ Student/Teacher/Senior, $25
☐ Subscription only*, $15/12 issues
(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State _____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____ Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**
Return to: **Membership Secretary, ACS Monterey Bay Chapter**
P.O. Box HE, Pacific Grove CA 93950

ACS Chapter: #24

UPCOMING EVENTS & TRIPS

Now-January 21, 2001
Under Antarctic Ice, Photographer Norbert Wu Pacific Grove Museum of Natural History.

January 14, 2001
Weddell Seals: Underwater Predators of the Antarctic, lecture by Terrie Williams at the Pacific Grove Museum of Natural History. For details visit www.pgmuseum.org/

January 15, 2001, 8 a.m.-10 a.m.
☆ SIGN UP NOW! ☆
ACS Monterey Bay Chapter
Gray Whale Cruise
$18 ACS members/ $20 non-members.
Space is limited. For reservations call Katherine or Sue at 831-373-2274, then mail check (payable to ACS Monterey Bay Chapter) to ACS, PO Box HE, Pacific Grove, CA 93950. All proceeds go toward local research and education programs supported by the ACS Monterey Bay Chapter.

January 20 and April 28
24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watcing vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to observe Sperm, Gray, Blue and Beaked whales, possibly Pilot whales and offshore dolphin species, as well as winter pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or Adam at Sea Landing 805-963-3564.

March 10, 2001
ACS National Santa Catalina Whale Watching
Call ACS at 310-548-6279 or email ACS@pobox.com

March 16-17, 2001
Monterey Bay National Marine Sanctuary Symposium "Fishing for Our Future" Fisheries conservation and management symposium.
8am - 4:30pm, each day
Cocoanut Grove, Santa Cruz (at the Boardwalk)
Call Liz Love at the Monterey Bay National Marine Sanctuary 831-647-4255 or email liz.love@noaa.gov

2001 ACS National Whale Watching in Baja
San Ignacio Lagoon Base Camp, Feb.& March 2001 -- 5 day land based adventure; fly from/return to San Diego.
Baja Lagoon & Sea of Cortez, March 15-25 -- 11 days aboard the Searcher leaving from/returning to San Diego. For reservations/information, WHALEADVENTURES@prodigy.net, write to ACS Whale Adventures, 801 Stanley Ave., Long Beach CA 90804, or call 562-438-8960.
For more information on ACS Baja trips visit http://www.acsonline.org/cruises.htm

January 15, 2001, 8 a.m.-10 a.m.

☆ SIGN UP NOW! ☆

ACS Monterey Bay Chapter

Gray Whale Cruise

$18 ACS members/ $20 non-members.

Space is limited. For reservations call Katherine or Sue at 831-373-2274, then mail check (payable to ACS Monterey Bay Chapter) to ACS, PO Box HE, Pacific Grove, CA 93950. All proceeds go toward local research and education programs supported by the ACS Monterey Bay Chapter.

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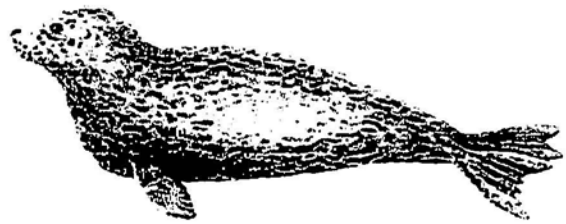

Phoca vitulina

Date: Thursday, February 22nd
Time: 7:30 p.m.
Speaker: Teri Nicholson, Moss Landing Marine Laboratories
Title: **Harbor Seals in Monterey Bay: their social structure and underwater behavior**

The difficulty of observing the underwater lives of Harbor seals has long been a barrier to understanding their social behavior such as hierarchies or competition for dominance among males. In other California pinnipeds such activities have been the object of study for many years at places such as Año Nuevo, giving us a now complete picture of Elephant seal breeding biology.

The amazing water clarity and presence of habituated, tame and abundant Harbor seals in Peninsula waters have allowed our speaker to penetrate the barriers to observation and uncover the remarkable social interactions established among individually identified male seals. Using video camera and hydrophone, patience and a physiology as resistant to our cold water temperatures as the seals themselves, Teri has recorded their previously unknown "roaring" and clustering. The splashing, rolling, somersaulting behaviors seen by observers onshore, are now made more comprehensible by her long term underwater observations.

Teri's thesis research at the Moss Landing Marine Labs. has been supported by our Chapter. She now works for the Sea otter program at the Monterey Bay Aquarium. Please join us for a new and interesting perspective on these familiar and highly visible local residents.

Reader contribution of articles, announcements, poems, scanned photographs or other printable items related to cetaceans is welcomed and encouraged. Please email editor at tonylorenz@redshift.com or send your submission to ACS, Attn: ACS Editor, PO Box HE, Pacific Grove 93950.

ACS Monterey Bay Chapter
www.starrsites.com/acsmb/

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P.O. Box HE
Pacific Grove CA 93950

Oops!: David Zaches's name was inadvertently omitted from the Board list last month - Sorry Dave!

FROM THE EDITOR, Tony Lorenz

As most ACS members have no doubt heard, on January 17, 2001, an Ecuadorian oil tanker with diesel and bunker fuel ran aground just 800 yards from San Cristobal Island in the Galapagos Archipelago. Over 200,000 gallons of oil spilled into the sea. The spill's western migration has reached Santa Fe and Santa Cruz Islands and threatens Marine Iguanas, Masked- and Blue Footed- Boobies and Frigate Birds.

The Galapagos Islands lie on the equator 600 miles west of Ecuador. The Galapagos Archipelago consists of 16 volcanic islands and numerous islets and rocks in the Pacific Ocean. In 1535 the Spanish Bishop Tomás de Berlanga was blown off course on his way from Panama to Peru, landed and named the islands after the giant tortoises *(galapagos)* he found there.

In 1835 Charles Darwin visited the Galapagos Islands, stayed for 35 days and made many observations particularly of the various species of finches that were later relevant to his *Origin of Species*. The Galapagos were home to unique and endemic plants and animals found no where else in the world. The ecological deviations did not fit the scheme of current scientific thought and what Darwin observed in the Galapagos haunted him until his revolutionary theories of evolution were born, ideas that forever changed how we view ourselves and our place in nature.

The Galapagos Islands are one of the most biologically rich, ecologically cherished, and scientifically studied regions in the world. They are estimated to still have 96% of their endemic species intact. Some endemic species that live in the Galapagos include the Flightless Cormorant, a seabird that has lost the ability to fly and numbers only 700-800 pairs. The Galapagos Penguin which at 35 centimeters tall is the only Penguin to nest entirely in the tropics. The Galapagos Marine Iguana, the only living marine iguana in the world, subsists entirely on algae.

The animals that live below the surface in Galapagos waters are equally as extraordinary. They include Sperm Whales, Galapagos Sea Lions, Marine Turtles, Bill Fish, Hammerhead Sharks, Eagle Rays, Giant Tuna, hundreds of reef fishes, corals and invertebrates. The prodigious and amazing list goes on and on.

The Galapagos' first encounter with humans was less than amicable. First Buccaneers slaughtered tortoises, birds and iguanas, and later Whalers slaughtered Sperm Whales for their oil. When the whales dwindled the Giant Tortoises became the target of oil commerce. The sealing industry's quest for furs almost drove the Galapagos Fur Seal to extinction. Then there was the feral onslaught, by far the most insidious aspect of early human impact on the Galapagos ecosystem. The introduction of cattle, pigs, rats, donkeys, and horses systematically altered the islands.

The entire evolutionary lineage of the Galapagos animals was molded in the absence of large efficient predators and pernicious toxic substances. The Galapagos were also discovered much later by humans that any other major group of islands anywhere in the Pacific Ocean, effectively protecting the islands from the massive waves of extinction that seem to follow humanity.

Due to wind, currents and perpetual sun, and of course the type of fuel spilled, a cataclysmic disaster seems to have been avoided. Let this oil spill be a warning and a message to humanity that there are few places left on planet earth that industrial madness hasn't tarnished. There is only one Galapagos and one planet earth. Let's do our best to preserve them both.

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NORTHWEST ORCA POPULATIONS ARE DECLINING

By Michael Kundu, Project SeaWolf/Arcturus Adventure Communications, Marysville WA

Breaching skyward in an explosion of foam, J-1 sends a two-foot Chinook salmon tumbling, before it lands, stunned and motionless on the sea's surface. J-1, a 50-year old bull orca better known locally as 'Ruffles', quickly captures and consumes the fish, then deftly arches below the surface to begin the maneuver anew.

But for Ruffles, and the other members of his extended clan in the northwest, prey isn't always readily available. In fact, a regional salmon shortage is contributing to the alarming, fast-paced decline of J clan, commonly known as the 'southern resident' orca community.

Northwest researchers and environmentalists are concerned. This past summer, the southern resident orca community, comprised of J, K and L-pods, has dropped in number to only 83 remaining whales. This decline represents a decrease of 14% since January 1999, and a 17% overall decline since the middle 1990s. This drop is also in stark contrast to growth dynamics of other Pacific orca stocks in British Columbia and Prince William Sound, which appear to be increasing at a rate of 3% per year.

"We've recently compared survival rates on the southern resident population from 1974; comparatively these last few years, rates are at the lowest they've ever been," observes researcher Paul Wade, who with colleagues Ken Balcomb and David Bain, produced a draft population report at a National Marine Mammal Laboratory (NMML) workshop in Seattle this past April. Recent whale mortalities, including that of Ruffle's nephew J-18, a young, relatively healthy bull (and his mother J-10 a month later), have prompted biologists to gather and discuss that matter, and possibly seek to obtain an 'endangered species' listing for the southern resident population.

"The main factors which seem to be contributing to this decline are toxic chemical contamination, scarcity of prey, and the growing impact of marine vessel traffic present around orcas during their peak feeding and breeding periods," says researcher David Bain from the Whale Museum on Washington's San Juan Island. These three specific factors were also identified as prime concerns in the report published after the NMML workshop in April.

Toxic contamination, particularly the accumulation of polychlorinated biphenyls (PCB) in fatty tissues, have given the southern residents the distinction of being the most chemically contaminated marine mammals in the world. "These animals are literally considered 'toxic waste' when they wash up on shore," adds Robert McLaughlin, a boardmember for Project SeaWolf, a northwest marine wildlife advocacy group based in Washington State. "In fact, concentration levels in this orca population run almost twice as high as in the St. Lawrence beluga whales controversy," adds McLaughlin, "While PCBs have been outlawed in the US for some time, these orca have accumulated a 'legacy' of contamination that they continue to pass on, from mother to calf, generation to generation."

PCB accumulations are known to weaken mammalian immune systems, and make injured or sick whales more susceptible to infections and other illnesses. Combined with the added stress associated with prey scarcity, some whales, like J-18, seem destined to die in what would otherwise be their prime breeding years. While PCBs have been outlawed in the United States for more than two decades, the toxin persists in ocean sediments and continues to enter the food chain through prey species and, ultimately, into top level predators such as orcas.

Chemical contamination from other sources, such as industry and consumer-based toxins dumped into stormwater drains, rivers and streams leading to the ocean have also impacted survival and spawning habitat for salmon and other prey fish. "Certainly, the recent listing of Chinook salmon as an endangered species in the northwest is also a factor," says Ken

Balcomb, a whale researcher who heads the Center for Whale Research on San Juan Island. "To make matters even more complex, Puget Sound's herring stock - the prey that the salmon themselves feed upon - may be the next candidate species to win a federal 'endangered' status listing," adds Balcomb.

The decline in available prey cause orcas to range further afield to forage, and may have an additional impact on time needed for crucial resting, socialization and mating activities. "The solution to this problem is fish restoration," Comments Balcomb, "Not just with salmon, but also herring, groundfish and all other declining fish in the orcas' ecosystem - unless we do something about that, the southern residents may be gone in as few as three generations (25 years)."

Ironically, the growing eco-tourism industry itself is now considered a cause contributing to the decline. Ken Balcomb's colleague David Bain recently concluded a study that suggests the growing marine traffic around these whales might be adding to the impacts, and threatening their long-term survival. "While the southern residents don't appear to be leaving their foraging area altogether, we do have periodic disappearances -- and we have observed that their daily activities have changed as a result of vessel intrusion," says Bain.

Changes in behavior could be caused by the impact of increased stress and energy output resulting from boat avoidance maneuvers, deep-lung inhalation of poly-aeromatic hydrocarbons (gasoline fumes) from surrounding boats, and the interruption of necessary socialization behaviors such as breeding, bonding and instructing younger whales to forage for prey. "Boating restrictions around these whales is an issue that we can control," adds Bain, "Perhaps it's time to implement some access or proximity limitations and encourage the public to switch toward shore-based whale watching."

One other significant factor suspected of contributing to the current decline involves the historical live capture operations of the 1970s, that removed many breeding age orcas from this population for exploitation by the marine parks entertainment industry. Today, all but one of these captured whales are dead, but the sole survivor - a perfectly healthy and contaminant-free breeding age female from L-pod named "Lolita' - could become a mother to any entire generation of healthy offspring. Unfortunately Lolita is a performing orca in a Florida theme park, and her owner has no intention of releasing her to the researchers who would rehabilitate and return her to her wild family in the northwest.

Yet this last option might be the only way to stall the decline. Today, only seven sexually mature male orcas remain in the southern resident clans, two of these (including J1) are approaching the maximum life span estimated for males. And since orcas do not breed outside of their clans, there is validity to the observation that mortality will continue to exceed the current birth rate. Even if the southern resident orcas where to adapt and be capable of dealing with the immediate factors of prey shortage, pollution and vessel traffic, there are not enough new whales being born to reverse the overall decline.

Ultimately, the issue at hand appears to be whether the southern residents are headed toward extirpation. While there are an unknown number of killer whales roaming the world's oceans, each population, or stock, is thought to be genetically distinct. "The southern residents harbor unique genetic, social and linguistic characteristics," concludes SeaWolf's McLaughlin, "If these orcas were to disappear completely, we won't simply be losing a cultural and ecological cornerstone of Pacific Northwest identity -- we would also be losing irreplaceable biodiversity from our seas."

The loss of a pinnacle predator species in any ecosystem is a dramatic signal that the world's ocean are not well. While the Canadian government listed the southern resident orcas as a "threatened species" last spring, the United States is still awaiting the data necessary to consider a similar listing for the stock in 2001. Currently, the decline continues; what is evident is that new, proactive and immediate actions must be implemented to prevent the extirpation of the southern residents altogether.

In the Haro Strait, 'Ruffles' and his sub-pod continue to forage freely, leaving the inland sea periodically when the seasons change, or a migration of prey draws them to the outer coasts. For generations, his clan has endured climatic and ecological changes in their home waters, returning each spring to grace the Haro Strait with their breath-taking acrobatics and haunting underwater vocalizations.

There is still uncertainly of the fate that ultimately awaits the southern resident orca community; perhaps they will recover and replenish their ranks, or perhaps some turn of the tide will change the health of the northwest ecosystem so that their clans can flourish and begin a new cycle of ecological prosperity. Yet it

may also come, one spring, that the inland seas will remain, simply, silent.

What lies ahead is unknown, but one fact does remain clear -- without the songs of Ruffles and others of his clan, who have roamed these coastal waters for so many centuries, the northwest will be a far emptier place.

*Editor's note: Michael Kundu, a freelance photojournalist and filmmaker, specializes in wildlife, eco-tourism and extreme adventuresports subject in the Pacific Northwest. Kundu, a duel Canadian and US citizen, currently resides in Marysville, Washington.

Project SeaWolf
P.O. Box 987
Marysville, WA 98270

View Our Website Review of Northwest Eco-tourism Operators -- "Make Sure You Only Select The Best!"
http://home.earthlink.net/~projseawolf/ecos.htm

Links for Fun and Information:

ACS Monterey Bay Chapter website:
http://www.starrsites.com/acsmb
ACS National website:
http://www.acsonline.org
Monterey Bay Aquarium, Monterey
http://www.mbayaq.org/
Monterey Bay Whalewatch, Monterey
http://www.gowhales.com
Oceanic Society Expeditions, SF
http://www.oceanic-society.org
Island Packers, Ventura
http://www.islandpackers.com
Condor Cruises, San Barbara
http://www.condorcruises.com
Project Sea Wolf
http://home.earthlink.net/~projseawolf/
Sea Shepard Conservation Society
http://www.seashepherd.org

(If you know of a fun or interesting link to a website about anything related to whales let us know.)

Sea Shepherd Conservation Society is the originating source of this article. Reprinted with permission.

THE FEROCIOUS ISLES "SOMETHING IS ROTTEN IN THE STATE OF DENMARK"

Hamlet. Act 1. Scene IV
By Captain Paul Watson

Halfway between the Scottish Shetlands and Iceland can be found twenty-two beautifully rugged, rocky green islands that make up the Faeroes. Seventeen of these islands are inhabited by some 45,000 people who enjoy one of the highest per capita standards of living in the world.

The capital city, Torshaven, is home to one of the world's oldest parliaments. In her streets can be found the most expensive automobiles, parked in front of shops that sell the latest luxury goods from around the globe. On the sidewalk, the young people dress like their peers in Copenhagen or London, with pierced noses, hair colors that reflect the entire spectrum, and designer clothing ripped and torn in the appropriate places. In outward appearance, it is no different from any other modern European city.

The Faeroese are a prosperous people thanks to their successful fishing industry and a fleet that scours the North Atlantic for the living silver treasure that they catch, process, and export.

Although the Faeroes are a Danish Protectorate, the Faeroese speak a Nordic tongue that more closely resembles Icelandic. For a millennium they have lived under Viking rule. After the longboats, the Norwegians ruled, followed by the Danes to the present day. For the last two decades, the Faeroese have debated independence from Denmark. The only obstacle to this goal is the one billion kroner in annual subsidies that Denmark provides.

This is a cozy relationship for the Faeroes. Denmark is a member of the European Union but the Faeroes are not. Thus they avoid the negative aspects of EU membership and benefit from indirect trade with the EU by having a close trading relationship with Denmark.

In short the Faeroese have a quiet little economic paradise. They have no unemployment, completely subsidized government and social welfare programs, a rich resource base, and a viable culture.

It's not a bad place to live either. The Gulf Stream provides a mild climate all year round, despite a latitude of sixty-one degrees north. The islands have an airport and ferry service to Scotland, Norway, and Denmark. During the summer, tourism is a thriving industry. Behind this veneer of paradise, however, is a dirty little secret: the Grind.

"It is a gift from God," former Prime Minister Atli P. Dam told me once. "The Grind is a strong and old tradition." Faeroese government spokesperson Arni Olafsson told me years ago that the Grind was the very foundation of the Faeroese culture. "It is what makes us Faeroese," he said.

Yet to any civilized observer from the outside, the Grind is one of the bloodiest, most cruel, and most savage traditions in the world "It is an obscenity," the late Sir Peter Scott once said to me. Scott, an ornithologist, who once studied birds on the Faeroes, was the son of famed Antarctic explorer Sir Robert Falcon Scott. "I think it's incredibly cruel. The killing is a dreadful thing. It's a wicked thing to do to any animal. Tradition cannot justify this behavior," said Scott.

In the Faeroes, the Grind is practically a religion. It is ritualized brutality and traditional torture, punctuated by public drunkenness. The victim is the defenseless pilot whale, whose migrations throughout the year, especially during the summer months, bring the pods into the waters near the Faeroes, where they are herded into bays, stabbed, speared, pelted with stones, slashed with outboard motor blades, and slowly and joyfully slaughtered. They die amidst the laughter of children and the drunken bellows of their hooligan fathers.

Each year, between 1,500 and 3,500 pilot whales die in scarlet agony on the beaches of the Faeroe Islands. Children rip the fetuses from the pregnant mothers and hold them up like trophies. Men hack through the necks of the struggling whales to sever the spinal cords, a process that can take ten minutes or more. The bays turn blood red, and the whale carcasses litter the shore, their purple-black guts spilling onto the sand.

Although the Faeroese do eat whale meat, the kill provides much more meat than can be consumed. Traditionally, the whales provided subsistence to a people far removed from the rest of the world, before imports and the emergence of their lucrative export market. Today, with no practical need to kill whales, the slaughter has intensified. This is because the Faeroese now enjoy a high standard of living and thus more leisure time - today they have more time to hunt whales for pleasure. Today it is a sport, big-game hunt, and an orgy of blood, providing entertainment and an outlet for aggression, an excuse to get together, drink, and indulge in a community festival.

> *"Murder most foul, as in the best it is.*
> *But this foul, strange and unnatural"*
> *Hamlet. Act 1, Scene 5*

The largest whale hunt in history is now done for fun, not survival. A history of the kill figures, all meticulously recorded in the Faeroese archives tells the story.

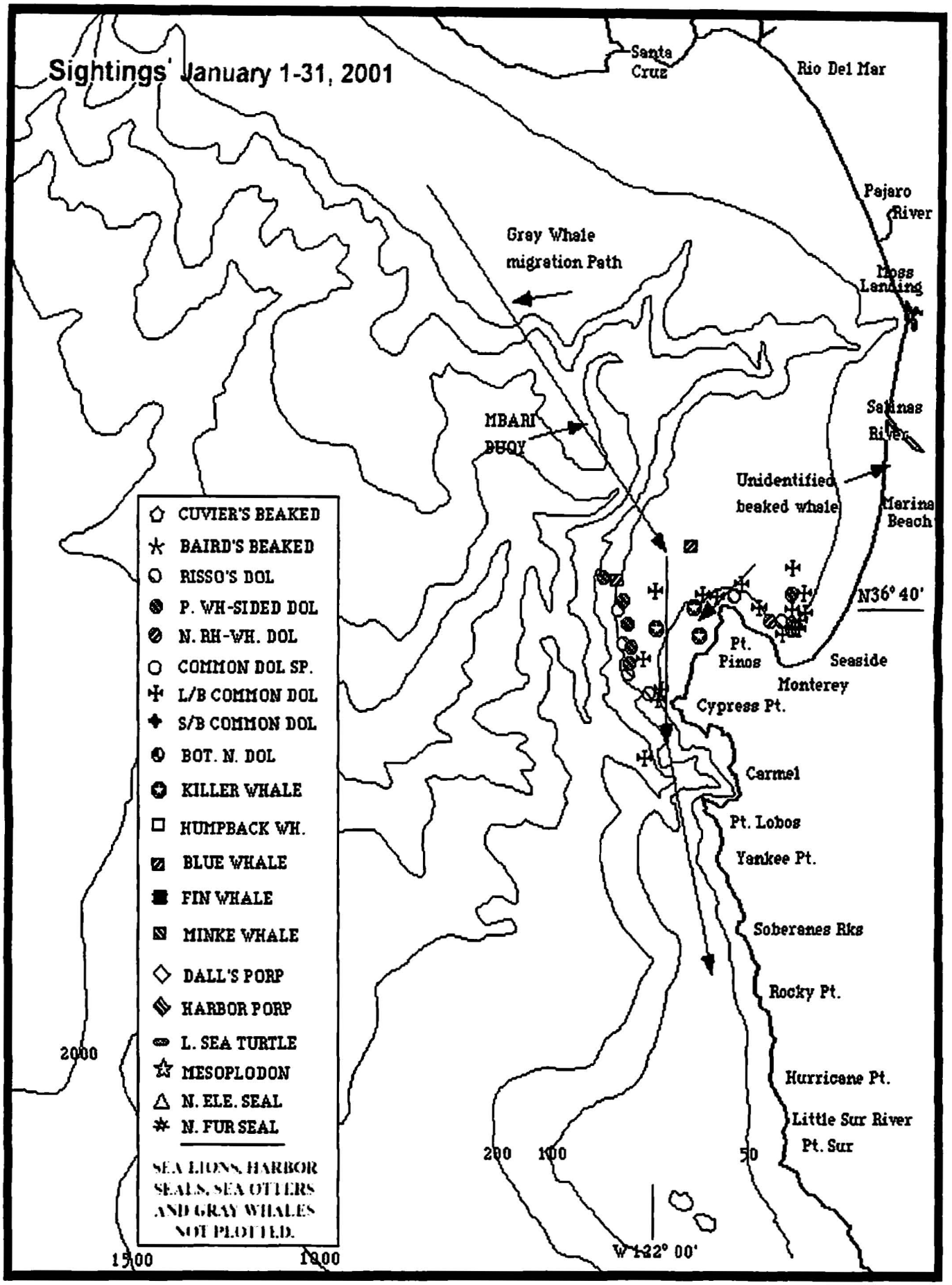
In the eighteenth century, the annual kill was around 500 whales per year. In the nineteenth century, the annual kill was approximately 900 per year. Those rose to approximately 1,500 whales per year from 1936 to 1980. Since 1980, however, the average kill has jumped, between 2,500 and 3,500 whales per year. In 1986, half the whales taken, some 1,500 whales, were killed and the bodies towed out to sea and dumped.

The Faeroese insist they eat all the meat. Simple mathematics reveals this to be an impossibility. An average annual kill of 3,000 whales means one whale for every fifteen Faeroes citizens. If one whale provides a conservative estimate of two tons of meat per whale, this translates into 266 pounds of meat per year per man, woman, and child on the islands. To complicate these statistics, the Faeroese have passed a law limiting the eating of whale meat to only once a week. This measure was taken to reduce the level of mercury toxicity in the Faeroese people. This means that to utilize every whale, each citizen must conservatively consume 5.1 pounds of whale meat each week, and this would have to legally be consumed in one day.

When one takes into account that many people in Faeroes especially in the main city of Torshaven, do not consume much, if any, whale meat, the claim of total consumption moves into the realm of the fantastic. In addition, the annual sales in the Faeroes of beef, mutton, lamb, pork, chicken, and fish demonstrate that this is not a protein-deficient community.

The simple fact of the matter is that these whales are slaughtered for sport and there is no subsistence or economic motivation to justify the hunt at all.

The pilot whale (Globicephala melaena) is a highly complex, intelligent, and sociable animal that can reach


Sightings' January 1-31, 2001
Santa Cruz
Rio Del Mar
Pajaro River
Gray Whale migration Path
Moss Landing
MBARI BUOY
Salinas River
Unidentified beaked whale
Marina Beach
N36° 40'
Pt. Pinos
Seaside
Monterey
Cypress Pt.
Carmel
Pt. Lobos
Yankee Pt.
Soberanes Rks
Rocky Pt.
Hurricane Pt.
Little Sur River
Pt. Sur
CUVIER'S BEAKED
BAIRD'S BEAKED
RISSO'S DOL
P. WH-SIDED DOL
N. RH-WH. DOL
COMMON DOL SP.
L/B COMMON DOL
S/B COMMON DOL
BOT. N. DOL
KILLER WHALE
HUMPBACK WH.
BLUE WHALE
FIN WHALE
MINKE WHALE
DALL'S PORP
HARBOR PORP
L. SEA TURTLE
MESOPLODON
N. ELE. SEAL
N. FUR SEAL
SEA LIONS, HARBOR SEALS, SEA OTTERS AND GRAY WHALES NOT PLOTTED.
2000
1500
1000
200
100
50
W 122° 00'

a length of twenty feet. They are easy to round up. The usual practice is to locate the leader of the pod; this whale is then separated with a blade the Faeroese call a vakn and stabbed with a long knife called a grindaknivur. The wounded whale is then harassed with repeated strikings from fastakast, a rock attached to a rope. The whale is thus wounded, stressed, and forced toward shore. The rest of the pod follows. Young whales, especially babies, are wounded, forcing the mothers to remain nearby, ready for the vicious soknarongul, a heavy iron hook that is imbedded in their blow-holes.

There is nothing pretty about the slaughter. The Faeroese however, remain unashamed. They even sell postcards of the kill, showing the Faeroese flag proudly flapping over a blood-filled bay full of dying whales.

> *"No jocund health that Denmark drinks today." Hamlet. Act 1. Scene 2*

Ironically, the Grind is a threat to the people of the Faeroes themselves, Pilot whales are notoriously polluted which heavy metals, especially mercury. Marjun Hansardottir of the Faeroes Health Department is worried. "The mercury content in the Faeroese people is very high, far higher than in the Danes," she said. In fact, the Faeroese have the international distinction of having the highest levels of mercury in their bodies. The Grind is actually killing many Faeroese. But traditions die hard and the cultural motivation to eat whales seems to be stronger than self-preservation. It's very much like smoking. Everyone thinks that it will affect the other person and never themselves.

The Faerose are so defensive of their Grind that they have violently opposed anyone who attempts to interfere with it. I disrupted the Faeroese hunts in 1985 and 1986. Our 1986 campaign was documented by the BBC in a film called Black Harvest.

The Faerose became very frustrated with our use of sound to divert whale pods away from the islands. In retaliation they launched an attack on my ship and crew, and we found ourselves in a defensive battle against Faeroese police armed with guns and tear gas which we countered with cannon-loads of chocolate and cream pie filling.

The Faeroese were so angry that I was actually charged with attempted murder in Denmark. However, when the newspapers in Copenhagen learned that we had pied the police, the Danish public found the whole affair hilarious, and the charges against me were dropped. We were able to keep the whales from being killed while we were there, and our presence in 1986 resulted in a lower kill for that year. But the hunt continues, and even though the whale populations are declining, the Faeroese have shown no desire to end the killing.

Over the last few years, the Sea Shepherd Conservation society has organized a successful boycott of Faeroese fish by three major supermarket chains in Germany. Now some 20,000 stores are refusing to sell Faeroese fish products. This has already cost the Faeroese millions of dollars. Sea Shepherd is now focusing on putting pressure on the large Dutch-based multinational Unilever. This company is the largest distributor of Faeroese fish, and if we can convince Unilever to join the boycott, then we can force an end to the whale hunt through economic pressure.

In Europe we have focused on turning the Unilever mascot a little cute bear called Little Ruby, into a possessed killer of whales. We have called for a boycott of Unilever companies like Dove soap, Best Foods, Slimfast and ironically, the Ben and Jerry's Ice Cream Company. Unilever purchased Ben and Jerry's in March 2000, and this placed America's most famous environmentally concerned company in a very embarrassing position. Ben and Jerry's is now directly associated with the largest whale slaughter on the planet.

Both Unilever and Ben and Jerry's have ignored all letters and calls from the Sea Shepherd Conservation Society. In response, numerous groups and organizations have organized protests in front of Ben and Jerry's Ice Cream parlors. To focus attention on this campaign to pressure Unilever and Ben and Jerry's, I have taken my ship to the Faeroes to patrol all summer with the objective of diverting pilot whale pods away from the island.

My ship Ocean Warrior entered Faeroese waters on July 7 for a summer of face-to-face opposition with the cruel and bloody whale killers of the Ferocious Isles. I'll report our results in the next issue of Ocean Realm.

Printed in Ocean Realm, Summer 2000.

SIGHTINGS

Compiled by Richard Ternullo
ACS 1/30/01

Blue Whales have made a late season appearance and provided exciting sightings for everyone. The explanation of their presence is somewhat of a mystery, but old records indicate their presence into December. Gray Whales will continue to be the most often see baleen whale until April. Small toothed whales should be seen often and in great number through the winter

Date	# of animals	Location	Obs
		BLUE WHALE	
12/5	2	4 mi W Pt. Piños	MBW
1/5	1	3 mi NW Pt. Piños	LO
		GRAY WHALE	
Seen daily from Boats and shore sights. So far there are 2 sightings of cow/calf pairs.			
		UNIDENTIFIED BEAKED WHALE (MESOPLODON?)	
1/4	1	Monterey Dunes Colony	MMC
		KILLER WHALE	
1/21	4(2 males)	2 mi W Pt. Joe	LO
CA60,80			
1/24	1	Ocean View and 17 Mile Drive	KM
1/28	12	.5 mi S Pt. Piños	RS
Chasing **LONG-BEAKED COMMON DOLPHIN.**			
1/29	20	4 mi SW Pt. Piños	MBW
Killed and ate 1 **CALIFORNIA SEA LION?**			
		RISSO'S DOLPHIN	
1/14	200	5 mi NW Pt. Piños	HN
Associated with 30 **PACIFIC WHITE-SIDED DOLPHIN.**			
1/14	75	1 mi W Cypress Pt	HN
Associated with 25 **PACIFIC WHITE-SIDED DOLPHIN**			
1/20	2000	Pt. Lobos	DF
1/20	15-20	2 mi N Pt Piños	RO
1/28	40	1 mi W Cypress Pt.	WW
1/29	20	2 mi SSW Cypress Pt.	MBW
		PACIFIC WHITE SIDED DOLPHIN	
1/13	12	4 mi N Pt. Piños	HN
1/14	2000	5 mi NW Pt. Piños	HN
1/27	50	4 mi NW Pt. Piños	MBW

NORTHERN RIGHT WHALE DOLPHIN

1/22	50	Near Hopkins Marine Station	Mobs

Associated with 750 **RISSO'S DOLPHIN**

LONG-BEAKED COMMON DOLPHIN

There are 16 sightings of up to3200 individuals throughout the Bay and inner waters. Many within easy sight of shore.

CALIFORNIA SEA LION

Seen throughout the Bay with about 400-600 hauled out on the Monterey Breakwater.

HARBOR SEAL

Seen along rocky coasts from Monterey Harbor to Pt. Lobos and in Elkhorn Slough.

SOUTHERN (CALIFORNIA) SEA OTTER

Seen all along the rim of the Bay, Elkhorn Slough, and outer coast

DF, D. Frank, KM, K. Mc George, MMC, Marine Mammal Stranding Center, MBW, Monterey Bay Whalewatch, HN, H. Neece, LO, L. Oliver, RO, R Ortiz, RS, R. Smith, WW, W. Williamson

Oops Again!: Thank you to Richard Ternullo for his excellent Sightings maps and written compilations - his credit was accidentally omitted in last month's newsletter.

Around The Bay

ACS Gray Whale Cruise
On January 15, the Magnum Force captained by Leon Oliver took ACS whale watchers on an early morning two hour Gray Whale Fund Raising Cruise. With Alan Baldrige as chief naturalist, a total of 12 Gray Whales were observed, with some up close looks of whales and flukes. Several seabird species were seen, but unfortunately common dolphin were not found. Good sea conditions were prevalent and a good time was had by all. A record amount of money was raised - over $1,000, enough for two $500-grants. A big thank you to Leon Oliver, Angelo Shake and Monterey Sport Fish & Cruise for helping ACS with a successful trip.

Beached Beaked Whale
A still as yet undetermined species of beaked whale washed up near Salinas River State Beach in late 2000. Preliminary necropsy indicate that it may be Hubbs Beaked Whale *Mesoplodon carlhubbsi*. It is being examined at the Smithsonian. As soon as it is definitively identified the results will be disseminated.

Domoic Acid
Domoic acid was found by scientists in the sardines, anchovies and krill which fed on a toxic algal bloom in Monterey Bay last summer. Humpback and blue whales feed on the sardines, anchovies and krill, and although there are no documented cases, scientists are concerned that the gigantic marine mammals may be affected. More than 50 Monterey Bay sea lions were found to have died from domoic acid in a 1998 algal bloom, the first time the toxin was shown to have caused the death of marine mammals. The human nervous system is affected by the acid potentially causing short term memory loss, neurological and gastrointestinal disorders, and even death.

Point Piños Tide Pool Task Force
Point Pinos Tide Pool Task Force unveils new signs to protect marine life, and announces a research team to study human impacts. Members of the task force unveiled six new interpretive signs at Point Pinos on February 8. The signs are part of a larger community based effort to increase awareness and stewardship among visitors to tide pools.

Critter Cam: "Ocean Life Tracking Project"
Scientists hope to undertake the "Ocean Life Tracking Project" by tagging a variety of marine animals with electronic tracking technology known as "archival tags" which record temperature, pressure and light and will allow them to follow an animal's diving patters and estimated position. More than a dozen species, from elephant seals to seabirds, will be tagged and followed to help researchers learn more about the behavior of the animals as well as sea conditions, hopefully adding to the information which is critical in forwarding efforts for conservation.

Invertebrates on the Move in Monterey Bay
Some forms of life not documented in a 1939 census of Monterey Bay have since moved in, while others have become less common. Anemone *Anthopleura sola* has become abundant. The Strawberry Anemone and the Worm Snail are new arrivals. Some animals are disappearing and the reasons remain unclear, but the human hand is suspected in the form of over harvesting and development. Warming water is another possibility. The population of the ochre sea star once abundant has decreased significantly. Giant green anemones are now rare.

Recommended Reading

A Living Bay: The Underwater World of Monterey Bay, by local authors Lovell and Libby Langstroth. Over 200 magnificent color photographs and informed, accessible text. This book provides a dazzling picture of the rich underwater world of Monterey Bay. (UC Press/Monterey Bay Aquarium, 2000)

CONSERVATION NOTES

25 Million Year Old Whale Bones
Ojai musician Aaron Plunket found fossilized bones of a toothed baleen whale while fishing at Lake Casitas in Ventura County northwest of Los Angeles. L.A. Natural History Museum paleontologist Howell Thomas indicated in the Monterey Herald that this is the first find of its kind in California; whale bones have been found previously in Baja, Oregon and Washington. According to Howell, the find proves that toothed baleen whales existed off the Southern California coast.

14 Right Whale Calves Spotted
In what amounts to the first good news in some time for the highly endangered North Atlantic Right Whales biologists say they have spotted newly born calves in the waters off Florida and Georgia in the last two months. Considering that there are only 300 North Atlantic Right Whales left and that only one calf was born last year whale researchers are excited about the new calves.

Shark Finning Banned
Before former President Bill Clinton left office he signed a bill that outlaws the horrific and abhorrent practice of shark finning. That is, cutting off a sharks fin and throwing the dying fish back into the sea. The bill aimed mostly a Pacific Ocean fishermen supplying fins to Asian markets where they are prized as a culinary delicacy and an aphrodisiac. Tens of thousands of sharks, mostly blue sharks, are killed for their fins every year. Shark finning was banned in the Atlantic, Carribean, and Gulf of Mexico in 1993.

The objectives of the American Cetacean Society include engaging in educational, conservation, and scientific pursuits for the purpose of expanding scientific knowledge of whales, dolphins, porpoises, and related creatures. Meetings and activities feature Cetacea and various aspects of the marine environment. The American Cetacean Society is a 501(c)(3) nonprofit corporation. Donations are tax deductible.

Norway to Resume Open Whalemeat Export
Norway has decided to resume an open whale meat and blubber trade with the whales they kill annually in defiance of world opinion and a long standing global whaling moratorium and ban on whale trade. The San Francisco Chronicle reports that in particular the Norwegians wish to dispose of their "blubber mountain" consisting of hundreds of tons of stockpiled blubber which is not consumed by Norwegians but is highly saleable to Japan where it is considered a delicacy.

IWC May Soon Lift Ban on Whaling
The international ban on commercial whaling may soon be lifted. Environmental campaigners say an international meeting in Monaco has begun clearing the way for hunting to resume. Members of the International Whaling Commission could lift the 15 year ban this July. Under the Revised Management Scheme inspection teams would ensure catch limits aren't exceeded. Some fundamental differences are said to remain, but the RMS appears to have major support.

New Marine Sanctuary: Northwest Hawaiian Islands Coral Reef Ecosystem Reserve
On December 4, 2000, former President Clinton announced the creation of the Northwest Hawaiian Islands Coral Reef Ecosystem Reserve. The new coral reef reserve protects 131,800 square statute miles of the Northwest Hawaiian Islands. (Monterey Bay Marine Sanctuary is 5,322 square statute miles.) The remote and pristine coral reefs of the Northwest Hawaiian Islands comprise nearly 70% of America's coral reefs. This is the largest protected area ever in the U.S. This designation brings strong protection to reefs that are home to the endangered Hawaiian Monk Seal, sea turtles, sea birds, and reef fishes.

White Abalone Proposed for Endangered Species Act Protection. The White Abalone which has been proposed for endangered species listing may number as few as 2,500 individuals in the wild. Between 1969 and 1977 divers plucked 350,000 white abalone from reefs surrounding California's Channel Islands. The harvest peaked in 1972 when 86,000 were hauled in. On a recent census very few white abalone were observed.

UPCOMING EVENTS & TRIPS

Now until April 30

Elephant Seals at Año Nuevo State Reserve
20 miles north of Santa Cruz on State Highway One. For fee info & reservations far in advance, call 800-444-7275 or show up and hope for a cancellation. Observe elephant seal breeding season. Guided walk only.

Elephant Seals at Piedras Blancas
Just south of Piedras Blancas Lighthouse on State Highway One. Exercise caution when parking. Be careful and respectful of animals. Guided walk only.

2001 ACS National Whale Watching in Baja
San Ignacio Lagoon Base Camp, *Feb.& March – 5* day land based adventure; fly from/return to San Diego.
Baja Lagoon & Sea of Cortez, *March 15-25* – 11 days aboard the Searcher leaving from/returning to San Diego.
For reservations/information, WHALEADVENTURES@prodigy.net, write to ACS Whale Adventures, 801 Stanley Ave., Long Beach CA 90804, or call 562-438-8960. For more information on ACS Baja trips visit http://www.acsonline.org/cruises.htm

March 7

Marine Conservation Public Forum Series: "Saving Our Seas" at the Monterey Bay Aquarium. 7-9pm
Series 1: New Approaches for a New Millennium, "The Value of Ocean Wilderness" featuring speakers Dr. Roger Payne, Dr. Jane Lubchencu and Dr. Michael Orbach. Call Monterey Bay National Marine Sanctuary at 831-647-4201, or see www.mbnms.noaa.gov.

March 11

Point Mugu Whale Festival at Point Mugu State Park. For information call (562) 437-4376.

March 16-17

Monterey Bay National Marine Sanctuary Symposium
"Fishing for Our Future" Fisheries conservation and management symposium.
8am - 4:30pm, each day
Cocoanut Grove, Santa Cruz (at the Boardwalk)
Call Liz Love at the Monterey Bay National Marine Sanctuary 831-647-4255 or email liz.love@noaa.gov

March 17

ACS Los Angeles Chapter, Floating Fiesta Whale Cruise aboard the Monte Carlo with whale expert John Heyning for a 9 hour excursion to the west end of Santa Catalina. For information call (562) 437-4376.

March 24-25

Santa Barbara 7th Annual Whale Festival
10am to 5pm at the Santa Barbara waterfront. Parade, food art and crafts, including marine artwork by Peter Folkens, George Sumner and Bud Bottoms. Call 800-897-3187 for information.

April 6

Don Croll, UC Santa Cruz "Marine Mammals and Coastal Oceanography." Seminar Room, Moss Landing Marine Laboratories, 4:00pm.

(continued on back page)

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State_____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____
Exp.Date_____
Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**
Return to: **Membership Secretary, ACS Monterey Bay Chapter**
P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

UPCOMING EVENTS & TRIPS,
continued from inside back page

April 14
Seminar: Bridging the Gulf between Fishermen and Scientists, Speaker: David Dobbs will provide a fresh perspective on how we view our local fishery. Monterey Bay Aquarium 7pm.. Call Aron King 647-4257.

April 28, September 9, November 3
24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to observe Sperm, Fin, Gray and Beaked whales, possibly Pilot whales and offshore dolphin species, as well as winter pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or E-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

May 6-10
European Cetacean Society ANNUAL Meeting
Rome ITALY
www.webinter.nl.net/users/jwbroekema/acs

May 21-24
52nd Tuna Conference, University of California, Lake Arrowhead Conference Center
www.swfcsc.ucsd.edu/tunaconf.htmlsmm

March 30-April 1
The Southeast and Mid Atlantic Marine Mammal Symposium, Duke Univ. Marine Laboratory, Beaufort NC Visit the website at http://kogia.ml.duke.edu

Nov. 28-Dec.3
14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC.
http://www.smmconfernce.org

American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

Soundings

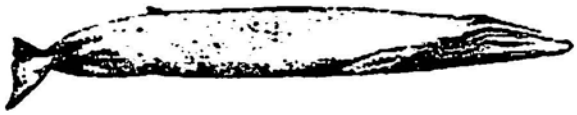
American Cetacean Society ~ Monterey Bay Chapter **March 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)



Balaenoptera musculus

Date: **Thursday, March 29th, 2001**

Time: **7:30 p.m.**

Speaker: **Captain Fred Benko, owner/skipper "The Condor", Santa Barbara**

Title: **Marine Mammals of the Channel Islands National Park and Adjacent Waters.**

Off the southern California coast, south of Point Conception lie the Channel Islands, now protected in part as a National Park and National Marine Sanctuary. This area differs in several important ways from our own Monterey Bay region and our speaker, a very well known skipper/naturalist, with 27 years of experience conducting whale watching and natural history cruises, will discuss these features. Captain Benko received the Environmental Hero Award from the President in 1993 and has served on the Channel Islands National Marine Sanctuary Advisory Council.

Gray whales take an interesting offshore route among the Islands, and mother/calf pairs are frequent. Summer whales include Humpbacks and especially Blue whales, the latter often present spectacular viewing while feeding. Fin and Minke whales are frequent. Toothed whales include Orcas, Risso's and Long-beaked common dolphins and occasionally other rarer species. Bottlenose dolphins are numerous. Short-finned pilot whales are attracted to the largest squid winter spawning stock in California waters.

Our speaker will also discuss other marine mammals such as pinnipeds and, if time permits, will comment upon Native American utilization.

Please join us for an exceptional opportunity to learn about the species occurring in this island-studded area of California waters.

Reader contribution of articles, announcements, poems, scanned photographs or other printable items related to cetaceans is welcomed and encouraged. Please email editor at tonylorenz@redshift.com or send your submission to ACS, Attn: ACS Editor, PO Box HE, Pacific Grove 93950.

American Cetacean Society
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FROM THE EDITOR...TONY LORENZ

Off the coast of Southern California lies an archipelago of islands, a string of gemstones surrounded by the great Pacific wilderness. These are the California Channel Islands and the Channel Islands National Marine Sanctuary. On March 5, 1980, former President Jimmy carter signed a bill that established the Channel Islands National Park as America's 40th National Park. In September 1980, the Channel Islands National Marine Sanctuary (CINMS) was established to help protect the islands and the marine resources surrounding them.

The Channel Islands National Parks includes San Miguel, Santa Rosa, Santa Cruz, Anacapa and Santa Barbara Islands. Marine Sanctuary waters extend six nautical miles around the five Park islands. A shallow shelf surrounds the islands that extends three to six miles offshore with an average depth of 300 feet. The islands are situated at a convergence of warm currents coming up the California coast from the tropics and the cold water of the California Current flowing from the north. They are surrounded by deep basins and lie just south of one of California's major upwelling zones. There is also localized upwelling around the islands. The cold nutrient rich upwelled waters, combined with a mixing of temperatures and the convergence of species from the northern and southern ranges make this one of the richest marine environments along the California coast.

In CINMS 27 species of marine mammals have been identified, including 20 species of cetaceans, six species of pinnipeds and the southern sea otter. Within sanctuary waters can be found as many as 50-200 feeding Blue whales during their summer feeding season. The beautiful Finback and acrobatic Humpback whales also frequent these waters. Eleven other species of cetaceans can be found year round in most years appearing in substantial numbers as they migrate into or through the area.

There are six species of pinnipeds that make the Channel Islands their permanent home, either as breeding colonies or haul out sites. It is believed that the Channel Islands support a more varied population of pinnipeds than any other area of the world that is conveniently accessible to humans.

The Channel Islands also represent a haven for seabirds, and several bird rookeries exist here. On Anacapa and Santa Barbara Islands the endangered California Brown Pelican nests and breeds, representing the most important nesting rookery in California. The other islands represent one of the most important breeding areas for seabirds in the Eastern North Pacific.

Surrounding the islands live flourishing forests of giant kelp (*Macrocystis*) which can grow as high as two hundred feet and which is considered the fastest growing plant in the world, growing up to two feet per day under optimum nutrient conditions. Nearly one thousand plants and animal species flourish in the kelp forest, making it one of the most productive habitats in the world.

The Channel Islands National Park boundary extends 1.8 km (1 nautical mile) from the shore of each island.

The Channel Islands contain the site of one of the oldest human fossil remains found in North America. Fossil remains of the Arlington Springs woman has been radiocarbon dated at over 13,000 years old. These ancient Californians may have arrived by boat, taking a coastal migratory route rather than crossing the Bering Land Bridge; truly remarkable.

The Channel Islands were also home to the Chumash Indians. For 11,000 years this seafaring culture thrived on these islands foraging on the awesome resources that flourished in these waters. They are also responsible for one of the great technological achievements in Native American culture - the tomol or plank canoe. The tomol enabled them to overcome the water barrier between the mainland and the islands helping to establish a highly successful maritime culture.

It is a great privilege to have Captain Fred Benko visit from Santa Barbara to share his almost 30 years of plying the water of CINMS and surrounding ocean wilderness. He is a pioneer in whale watching, natural history expeditions and education. He has shown hundreds of thousands of people their first cetacean and opened up the wonders of our oceans planet to just as many.

If you would like to learn more about the Channel Islands:

Natural History of the Islands of California, by Allan A. Schoenherr, C. Robert Feldmeth and Michael J. Emerson (University of California Press, 1999)

Channel Islands, the Story Behind the Scenery, by Peter C. Howorth (KC Publications, 1982)

Cetaceans of the Channel Islands National Marine Sanctuary, by Stephen Leatherwood, Brent S. Stewart and Pieter A. Folkens (National Marine Sanctuary Program, 1987)
Channel Islands National Park, by Tim Hauf (Tim Hauf Photography, 1996)

Beautifully rendered *Channel Islands Nautical Charts* available through Channel Crossings, Marine Center Building, 125 Harbor Way, #21, Santa Barbara, CA 93109 (805) 963-3949, ccrossings@aol.co

Links for Education and Information:

ACS Monterey Bay Chapter website:
http://www.starrsites.com/acsmb
ACS National website:
http://www.acsonline.org
Monterey Bay Aquarium, Monterey
http://www.mbayaq.org/
Condor Cruises, San Barbara
http://www.condorcruises.com
Oceanic Society Expeditions, SF
http://www.oceanic-society.org
Island Packers, Ventura
http://www.islandpackers.com
Project Sea Wolf
http://home.earthlink.net/~projseawolf/
Sea Shepard Conservation Society
http://www.seashepherd.org
Tag a Tuna Website
www.tunaresearch.org
Audubon Living Oceans Program
www.audubon.org/campaign/lo

(If you know of a fun or interesting link to a website about anything related to whales let us know.)

The following article appeared in California Wild, Winter 2001.
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Gray Whales: The Gray Whale Returns to our Oceans - and Beaches

By PETER STEINHART

Eschrichtius robustus

The last three years have seen a sudden increase in the numbers of whales entering bays and estuaries along the west coast of North America, and washing up dead along the beaches. Scientists are trying to find out why.

The sea casts its dead onto the shore, but only after a time. The dark silence of its mysterious deliberation is unnerving, and we huddle on the beach, uncertain. When the sea casts up a whale, it is a considerable mystery, indeed.

In the past year, the sea has floated into human view the corpses of more than 300 gray whales. The strange offerings have washed up in Mexican coastal lagoons where gray whales breed and calve each winter, and along the California coast as they migrate north, from February to June, toward summering grounds in the Bering and Chukchi Seas. There are more deaths, as well, along the coast of Oregon, Washington and Alaska. The grisly remains draw curious humans, and they stand with hands cupped over their noses and tee shirts bunched over their faces to ward off the stench of death. They express awe, fear, sadness and anger. They look like pilgrims come to observe a religious mystery. A beach-cast whale is an omen. But of what? And when the sea casts forth so many, what can it mean?

On a beach south of Pescadero, a whale lies sphinx-like on its belly, firmly emplaced in the sand. Its side to the water, its head facing north, its lyre-shaped tail curves up the beach and points like an arrow back to sea. The asphalt gray still glistens on its lower back, but the front two-thirds are torn open and tossed about by the violence of the sea and the dismantling efforts of researchers who dissected the whale to find out what killed it. What remains is a vast, taffy-colored lump of rotting flesh, marbled with yellow and green and brown, now in the employ of crab and maggot and the bacterial legions which will turn it into pulp. A huge rostral bone lies exposed, looking like the head of some great prehistoric bird. Rows of baleen brushes show like fallen window blinds through the wreckage of its jawline. The enormous tongue has spilled out onto the sand in a shapeless gray green mass the size of a bathtub. Entrails and blocks of blubber lie strewn down the beach, and gulls peck at them greedily.

All day, the decaying monument draws human admirers. The locals come down in twos and threes, some curious, some reverently silent. One couple has heard about it on the radio and driven 50 miles to see it. A small man in a tractor cap has taken the day off from his job in Santa Cruz. They approach cautiously with covered faces. They bend down to peer into the mouth. They extend index fingers to touch the rubbery skin, to confirm that this was indeed something alive and quick, something that moved massively through the dark id of the sea, something that lived confident and wild and beyond the reach of human understanding.

The man from Santa Cruz stands back and sighs. "Too bad they did the autopsy," he says. "It would be such a nice thing for kids to come out here and see."

A thin, blade-faced Hawaiian man with long, silky black hair comes down the beach and walks appraisingly around the carcass. He has lived on the coast for a decade and once necropsied beach-cast whales and seals as a student at the University of California at Santa Cruz. He points out the hanging ribbons of baleen. He marvels that the barnacles growing like garlic braids on its chin are still alive, their flowery bodies emerging like small white palms from their calcareous shells. He is a connoisseur of whale strandings. He mentions that there is another whale carcass ten miles north at Tunitas Creek.

"It's been there for about a month and a half," he says, as if he has visited it regularly, watching the blubber drop away, the bone sink into the sand, the spirit of leviathan fade onto the wind and seep softly back into the sea. He recalls the stranding ten years ago of a blue whale on Ocean Beach in San Francisco. " It was 78 feet long, and it had an abscess as big as a car," he smiles. "There were blubber deposits on the beach for over a mile."

Behind him the lowering sun glints off the vertebral knobs of the whale's backbone, as it must have every few minutes, year after year, when the living whale surfaced to breathe, swimming six thousand miles south to Mexico, six thousand north to Alaska or Siberia. A turkey vulture rises off the beach and rides the wind, its long wings veering upward and outward, giving off the same gray sunlight as the whale's back. The vulture looks down at the whale, an ancient interest in its eye. An old connection: food and the promise of continued motion. An old freedom, if these humans would only disappear.

Fifty miles to the north, on the Marin Headlands, Marty Halina, a veterinarian with the Marine Mammal Center, performs a brief necropsy on yet another beached gray whale. To the east, the Golden Gate Bridge arches over the skyline of San Francisco. To the west, the open ocean spreads under a blue sky. At Halina's back, a 40-foot carcass lies on the sand in a tapestry of gull prints. A mob of gulls waits sullenly down the beach. Halina knows that this whale hasn't been here long. It still has much of its skin and it still has its whale shape. "This one's bloated," he says. "That's why they float." Coastal whalers in the 19th century would kill these whales with bomb-tipped lances, sinking them in minutes. They attached buoys to the harpoon lines before the whale sank and waited three to nine days for the animal to fill with gas, as it decomposed internally, and rise to the surface again. They would row out and tow the corpse ashore.

A whale that washes ashore has most likely been dead for days, possibly weeks. Halina looks at the gulls and ravens waiting on the beach and explains that they can't peck through the skin, the tough connective tissue underneath, and up to 20 centimeters

of blubber beneath that. He reflects that two hundred years ago grizzly bears would have come down to the beach to tear open the corpse, and then the birds and smaller mammals such as coyotes and foxes might feed on it. Once punctured, the corpse would deflate and flatten out. Crabs and sand fleas would mine it from within. Waves would work the bones into the sand. In time, there'd be no sign of the death.

This whale has been dead too long to allow the veterinarian to determine what killed it. Three days postmortem is usually too late to do histological studies which might reveal disease, and by the fourth day even gross lesions may no longer be recognizable. Halina will measure it, try to determine its sex and age, and take blubber and blood samples for later DNA testing. The blubber sample may give some indication of the general health of the animal when it met its demise. "Fifteen to 20 centimeters of blubber would be a normal animal," he says. "Under that would be a thinning animal. We're seeing all sorts: fat, thin, adults, calves. Some of them are adult animals in good body condition."

The die-off is all the more stunning because the gray whale had been regarded as one of the signal successes of endangered species recovery. Gray whales once migrated along the coasts of both the Atlantic and Pacific oceans. Commercial whaling exterminated the Atlantic stock and reduced the western population of the Pacific stock to perhaps as few as 200 individuals. While the western Pacific gray whale is occasionally seen, its numbers are thought to be low beyond recovery. But the California gray whale, protected since 1946, has made a spectacular comeback. From a population of perhaps 4,000, it rose to an estimated 26,000 and looked so secure that in 1994 it was removed from the endangered species list. In the meantime, a considerable industry sprang up taking tourists out to view whales as they passed close to shore. Mexico made sanctuaries out of the three large remaining calving lagoons and in 1999 turned back a proposal to develop one of them, San Ignacio Lagoon, into the world's largest commercial salt evaporation facility. Visitors to the calving lagoons can lean out of their rubber rafts and stroke and pat friendly whales. The gray had become the most familiar and, in a sense, the most dependable, of whales.

And then, in 1999, over 100 gray whales died in Mexico, 47 washed up dead along the California coastline, and more than 100 beached to the north. Last year, more than 300 died, including 58 in California. After years of steady increase, fewer calves were counted on the migration. In 1998, observers estimated 1,323 calves were born, in 1997 only 428, and last year 282. And migrating whales were turning up in bays and estuaries, such as southern Puget Sound, San Francisco Bay, and around Kodiak, Alaska. Many of these exploring whales weren't leaving these inlets alive. Last spring, perhaps 100 visited San Francisco Bay, and at least 18 of them died there.

Three hundred yards from Halina's stranded whale lay the flattened corpse of another. Washed ashore originally at Point Richmond, it had been towed out to sea for disposal, but fetched back by prankish currents. A mile farther east, at Fort Baker, another gray whale corpse rocked in the surf against a Coast Guard breakwater. The face and flipper bones had been planed bare and white by the sea bottom and the carcass was pale and skinless. The skeletal left flipper clawed in the surge and ebb of the pea green water, and each wave lifted its great bird-boned head so that it moved like an enormous white gull ponderously chewing some submarine meal.

What is happening? There are enough theories to float a whale-sized controversy. Pollution? Disease? Collisions with boats? Noise from increasing boat traffic or from secret Navy sonic tests? A failure of the food resources in Arctic waters? Could it be that the gray whale, as a recent government report put it, has recovered from whaling and is "nearing or exceeding its carrying capacity, causing the population to stabilize by means of increased mortality"?

One would think that with large, visible creatures like whales, it would be easy to get an answer. But whales do not give up their secrets easily.

For one thing, we don't have a clear idea what the pre-whaling population might have been. Estimates range from 15,000 to 70,000, a large spread based on big untestable assumptions about how many whales were taken by aboriginal hunters and 19th century commercial whalers. Counts of passing whales or calves in the lagoons alone can't tell us when the whales are approaching carrying capacity.

For another thing, it is almost impossible to do a meaningful autopsy. Since most beach-cast whales have been dead for more than a week, one can't generally find disease organisms or pollutant residues. Few whales wash ashore at locations where it is convenient to examine them. To get into the abdominal cavity and examine the stomach contents or take fecal samples, one may have to turn the animal over, and when a creature weighs 40 tons, that requires heavy construction equipment which can't be brought in. If the carcass washes ashore at a more accessible location, nearby property owners are not likely to welcome a bulldozer or the stench of rotting whale in their yards.

Last year, only one real autopsy was performed along the California coast that of a calf which stranded alive and had to be euthanized by a veterinarian. It proved to have domoic acid poisoning from ingesting toxic algae. But no one could say whether it had been a healthy whale before it ate the small invertebrates tainted with the deadly algae, or an animal already too desperately sick or hungry to resist eating the fatal repast. Fewer than half the whales stranded in Mexico and only six of the 73 stranded in Alaska could even be reached by someone with a tape measure.

In the absence of forensic evidence, those who come down to the beach to wonder are apt to suspect human agency: pollution, boat traffic, or secret underwater tests of military technologies. But there is little real evidence to support such suspicions.

The blubber of 28 whales stranded in the Northwest in 1999 was sampled for pollutants. But, says John Calambokidis, whose Cascadia Research Collective has been studying gray whales since the early 1980s, "There is no evidence that contaminants are a problem. Levels of contaminants in baleen whales in general are fairly low, as you would expect in animals that feed low on the food chain and in relatively clean water."

Nor is there any indication that collisions with boats play an important role. Two whales were struck by boats in San Francisco Bay, but among the 50-odd animals found dead along the Washington and Oregon coasts, says Brent Norberg of the National Marine Fisheries Service (NMFS), "We didn't have any animals with obvious blunt injuries that would precipitate death." Noise from increased boat traffic does not seem to be a likely explanation, for whale numbers have increased alongside the growing boat traffic without apparent changes in migration routes or other behavior.

Naval sonar tests preceded the strandings of several species of whale last March in the Bahamas and a mass stranding of Cuvier's beaked whales in the Mediterranean some years ago. But there are no known underwater naval tests along the gray whale migration route that would account for increased mortality. There were tests between 1995 and 1998 near the Pioneer Seamount, 50 miles west of Half Moon Bay. But no stranding events were associated with those tests. If one proposes long-term damage from exposure to that noise, one would still have to explain why whales not born then are dying today.

The biologists charged with unraveling this mystery believe the die-offs are related to a lack of food. Wayne Perryman, an NMFS researcher sampling the southbound migration, has noted a striking change. "We see fewer animals that are pregnant. And on the average, animals southbound the last two years have been narrower relative to their length than in previous years." Perryman says the skinniness of some animals is shocking: "I see bones protruding from the back and from the skull. I've never seen animals that thin before this year." He concludes: "I think we're seeing a change in overall condition. I think they're less fat, and for gray whales, being less fat when they're migrating means they're in poorer health."

Since the 1980s, whales have been appearing in locations where they haven't been commonly seen before. Calambokidis and Jim Darling, a Canadian researcher, have each shown that as the gray whale population has increased, an increasing number of whales stopped their northward migration far short of the Bering Sea and established summer residencies off Vancouver Island and the coasts of Washington and Oregon. Both researchers have learned to identify individual whales by means of distinctive pigmentation and barnacle patterns on their flukes and backs. Both were able to show that the same individuals return as summer residents year after year, and that they seemed to be doing well. Both concluded that as the population reestablished itself, the whales were probably returning to feeding areas they had occupied in pre-whaling days.

But in the last few years, whales turning up in other unexpected places haven't been doing well. Calambokidis believes the whales appearing in new locations such as southern Puget Sound and San Francisco Bay are the ones most likely to die. There were an unusually high number of strandings in San Francisco Bay in 2000, more than stranded along the entire California coast two years earlier. And, says Calambokidis, "None of the strandings we've documented in Washington state have been the seasonal residents. The animals we find stranded are usually new animals. In some cases, we've seen them for the first time over the preceding weeks, wandering around, seemingly aimlessly searching for prey....But one out of three or even one out of two animals we see alive in southern Puget Sound will end up dead."

Calambokidis thinks this is an indication that the whales have encountered a limit to their food supply. Gray whales are thought to fast entirely or feed sparingly during their southward journeys. He says, "If an animal that would be normally migrating to the Bering Sea after winter fasting is low on fat, it might not be able to finish the migration. That might bring them into unfamiliar areas like southern Puget Sound, looking for food."

Not every researcher agrees. Joe Cordaro, strandings coordinator for the NMFS in California, believes that the blubber thickness of most of the 18 whales stranded in San Francisco Bay this year suggests they were "in good body condition." But, says Perryman, "I don't think blubber thickness is a good indication of health." A stressed animal will draw on other body fat reserves before it depletes its blubber. And even if the blubber's lipid content is depleted, the fibrous connective tissue that gives blubber its structure may remain, and it may seem to have ample fat. So while an animal with little blubber is clearly in bad shape, an animal that appears to be fat could also be in bad shape.

If the problem is food, is it a downturn in the food supply or an upturn in the whale population? Have the whales simply recovered to pre-whaling numbers and reached carrying capacity?

Frances Gulland, Director of Veterinary Science for the Marine Mammal Center, believes the mortality is not typical of a population reaching carrying capacity. because "It happened too soon." She would have expected a gradual increase in mortality instead of this sudden burst. Perryman suggests this may be a short-term die-off due to unusual ice conditions in the northern feeding grounds. He observes that in the past two years, seasonal ice covering near-shore feeding areas in the Bering Sea has extended farther and lingered longer. Gray whales, he says, stay

Recommended Reading

Marine Mammals of the Eastern North Pacific Marine Sanctuaries, a concise and comprehensive waterproof guide. Concept, design and images by Pieter Folkens. Co-sponsored by several National Marine Sanctuaries and printed on environmentally sound synthetic press film. The handy folding guide features all 50 species of marine mammals known from the Eastern North Pacific, including beautiful detailed color images and descriptions of common behaviors of cetaceans, pinnipeds and sea otters. A must have for marine mammal enthusiasts.

away from such ice because, unlike the bigger bowhead whales, they can't break through it." You just don't see them around ice floes," says Perryman. And Perryman sees "a very strong correlation between length of feeding season in the Bering Sea and calf production in southern waters over the past seven years." Increasing numbers of calves have migrated north during years of lighter ice cover up to 440 in 1998. But with feeding areas covered by ice three weeks longer in 1999, that number plummeted to 141.

But, Perryman concedes, there is likely to be more than ice to blame. Evidence is developing that something else is happening in the northern seas, something that might be enduringly catastrophic.

Gray whales are bottom feeders, the only such creatures in the entire whale family. They are believed to feed opportunistically on a number of tiny animals, such as mysid and euphausid shrimp, which often swarm in the water column. While they may slip out of Mexican calving lagoons at night to feed on these and other pelagic creatures, the whales depend on the fat they put on during summertime feeding on bottom-dwelling organisms in the northern seas to fuel their long migrations. Russian scientists examining commercially killed whales in the Bering and Chukchi seas reported that the animals' stomachs were full and up to 95 percent of the contents were amphipods.

Amphipods are crustaceans, some of which spin tubes and form mats up to two centimeters thick on the seafloor. These tube-dwelling amphipods are detritus feeders, dependent on sea currents to bring them nutrients, and live in large but discontinuous colonies, highly abundant in some places, absent in others. A feeding gray whale swims along the bottom on its side, sucking up mouthfuls of mud and straining the animals through its baleen. The process leaves behind a plume of mud and silt. These pits can be detected on the seafloor with side-scanning radar. A study by Mary Nerini published in the *Journal of Zoology*, estimated that in 1980, in the Chirikov Basin, between St. Lawrence Island and the Bering Strait, 15,000 whales turned over nine percent of the available amphipod community in a year. A number of researchers now fear that the current whale population of 26,000 may be straining the resource beyond its capacity.

Ray Highsmith, a University of Alaska biologist, looked at amphipod populations in the Bering Sea between 1986 and 1988. He says, "We saw a 30 percent decline in productivity. It could have been just normal variation." Or it could have been due to increased feeding by gray whales. No one knows how quickly amphipod beds recover after a whale has fed on them. Some authorities suspect whale disturbance produces new substrate, churns up more available carbon, and actually enhances amphipod colonization and growth. Highsmith says at least some amphipods reproduce slowly. *Ampelisca macrocephala*, the species favored by gray whales in much of the Chirikov Basin, takes four years to reach reproductive age. Highsmith believes the whales may take the larger reproductive individuals out of an ecosystem, and the ecosystem might require decades to recover. Younger individuals, eight or nine millimeters in length, are not trapped by the whale's baleen; but by the time they are big enough to breed, other organisms, such as sand dollars, which are too large for these immature amphipods to prey upon, may take over.

Jackie Grebmeier of the University of Tennessee, who has been studying population structures and carbon cycling in these northern seas since the 1980s, sees alarming changes. "In areas where whales feed, we're seeing half as many amphipods and overall biomass as we saw when we began work in the 1980s." The die-off is all the more stunning because the gray whale had been one of the signal successes of endangered species recovery.

Evidence is mounting that the cause is something bigger than whales. Every ten or 20 years, Arctic atmospheric patterns change, and this seems to lead to major changes in fish populations, which in turn may lead to changes in marine bird and mammal populations. The recent declines in fur seals, harbor seals, Steller sea lions, and numerous seabird populations in Alaskan waters might well be due to these climate shifts. Grebmeier observes that walruses appear skinnier, too. And she sees a host of other changes going on in the water column and on the seafloor. "In the whole Bering Sea," she says, "we're seeing major changes going on at all trophic levels."

Water flows north from the Pacific through the Bering Straits, and the plankton it carries are essential to the life of the Arctic Ocean. Changes in atmospheric pressure patterns have slowed the current in recent years, and the slower water carries fewer diatoms, a major source of food for amphipods. Instead they bring many more coccolithophores, organisms 1/500th the size of a diatom that do not settle to the bottom as quickly as diatoms and, even when they do settle, they are not the preferred food of amphipods. Grebmeier, looking at areas in the northern Bering Sea that once hosted great numbers of amphipods, says, "We're seeing changes in grain size in the sediment. We've seen sediment material south of St. Lawrence Island getting thinner."

There are more dramatic changes going on all across the Arctic. Ice cover has been declining in the Arctic for two decades or more. Atmospheric pressure patterns have shifted 40 to 60 degrees counterclockwise, and surface water temperatures have warmed, while salinity deep beneath the surface has risen. These physical changes have brought about biological ones: the ice-water interface now hosts fauna increasingly suggestive of a freshwater ecosystem. And in some areas there is less organic matter in the water column, less falling to the seafloor.

The greater ice cover in the Bering Sea over the past two years might have played a role in the whale die-off, but no one can say whether this is a long-term development. Studies show that over the past two decades, ice cover has been declining in the Sea of Okhotsk and the Bering Sea. The more extensive ice of the past two years could be linked to the movement east and west of the Aleutian low and the Siberian high, two pressure features of the northern atmosphere that shift naturally every 20 or 30 years. It may be that these pressure systems lined up such that more ice-generating winter winds blew south over the Bering Sea, and that this year or next, the systems will dodge to the east or the west and the warmer regime will resume. And both the short-term advance of ice in the Bering Sea and the longer term reduction of amphipod beds in the Arctic could be bad news for the health of whales.

The role of climate is slow and mysterious. The atmosphere drives the oceans and the oceans drive the atmosphere. Sea feeds the sky and sky feeds the sea. But it is not clear whether the changing Arctic conditions and the slowing current at St. Lawrence Island are due to naturally recurring cycles of climate or are artifacts of global warming caused by human release of carbon dioxide into the atmosphere. It could be that, in the end, what is causing whales to wash up on the shores of California is ordinary people starting up their SUVS in the morning or leaving their computers on overnight or turning up the air conditioning on a hot summer day any of the thousands of humdrum things that modern humans do that consume energy. It could be that we send up invisible vortices of carbon dioxide, which, roiling up into the atmosphere, put new spins on the cyclonic cogs of Arctic weather.

But that, too, is still a guess. Says Sue Moore of the NMFS, "We're just kind of catching on to how this works. The whole science of it is only ten to 15 years old."

And, while so much evidence points to the food supply, disease cannot be ruled out, because no one has been able to autopsy enough whales. Frances Gulland autopsied a whale in 1998 that showed evidence of infection by equine encephalitis and another that had severe intestinal abscesses caused by parasites. Might there be a plague we don't yet recognize? Says Gulland, "We really need to examine more animals to get more information." Still, if more autopsies show evidence of a plague among whales, one would still have to ask whether reduced food sources made the whales more susceptible to parasites and viruses in the first place. The whales are most prone to infection in the bays and estuaries they sometimes enter for respite during their long migration.

"It's a big puzzle," says Moore. "We're working on it. But we don't have it nailed down yet."

The fact is that we don't really know what is happening to our whales. And that makes the mystery deeper, the deaths even more unsettling. A whale cast up on the beach is a breach of order, an obscuring of life's intention. And because of this, the main thing you see in the pilgrims on the beach is discomfort.

In the middle of June, two gray whales washed up onto San Francisco's Ocean Beach. The National Park Service, which patrols the area as part of the Golden Gate National Recreation Area, tried to tow them out to sea, but high winds and surf posed great danger to park personnel trying to cable them, so they decided to bury the whales. When I arrived on the beach, one was already buried, but the other still lay on the sand, pale-pink and white, its skin planed off by wave and rock. It had the shape of whale, flukes, rising backbone, long, tapering head and bird-beak upper jaw resting on the wider yoke of the lower jaw. During the night, someone had climbed on top of it and painted in large yellow letters, "East Bay Rats Motorcycle Club." A large excavator waited nearby for the tide to go out so that it might begin this whale's grave. A brawny, tattooed man sat in its cab and wondered: "Why don't the sharks get em? I just figure with all the predators out there, a nice big piece of meat wouldn't last long."

People walked by, bunching towels and tee shirts over their faces and fanning fingers under their noses. A Park Service media officer stood by to answer their questions: What kind of whale? Why did it die? She was one of ten Park Service employees two bulldozer drivers, a maintenance supervisor, four safety people to keep the public away from the machines, and two full-fledged rangers with guns on their hips called away from their usual duties to attend the mystery.

The media officer said a man had telephoned offering to dynamite the whales. "That's been done before," she said disapprovingly. Years ago, someone attempted to dispose of a beached whale in Florence, Oregon, using dynamite, and bits of flesh flew, spattering everybody in gore. Huge hunks of blubber rained down, smashing people's cars.

Two yellow school buses stopped in the parking lot and disgorged 50 schoolchildren in blue sweatshirts proclaiming them students at Hughson School in Modesto. They raced down to the beach, each clutching an empty Ziplock bag, and a parent explained that they had come expecting to collect seashells, though discarded hypodermic needles might be more common on this most urban of beaches. The children stopped, shocked at the enormous death monument before them, stunned by the odor and by the degree to which this was unlike the whales they had seen in picture books. A mother bent down to explain, "There are so many animals. This is Mother Nature's way of getting rid of them."

Her daughter grimaced. "Let's go," she said.

The tide was out, and the bulldozers rumbled through the surf, then turned back up the beach to face the whale. They placed their buckets against the beast and lifted, aiming to roll it higher up the beach where the excavator could dig deep without having seawater well up and cave in the sides of the hole. They heaved and the whale rolled, picking up a coating of sand. With each push, the blubber shuddered heavily, the head bobbed and the mouth gaped open.

The excavator took less than 30 minutes to dig a trench big enough to hide a city bus. The bulldozers made one last lunge and the great beast tumbled into the hole. Twenty minutes later they had bladed sand over the grave and packed it down, leaving a mound a little higher than the surrounding beach.

Two hours later, a family had spread a big red beach blanket over the mound. Children wandered down to the water's edge and stood nervously with their buckets and shovels held high over the hiss and ebb of surf. They peered giddily down at their toes in the water, as if afraid they might fall into a mysterious and dangerous world.

PETER STEINHART is the author of The Company of Wolves *and* Two Eagles/Dos Aguilas.

California Wild magazine (formerly Pacific Discovery), Natural Sciences for Thinking Animals, The Magazine of the California Academy of Sciences. www.calacademy.org/calwild/

SIGHTINGS
ACS 2/28/01
Compiled by Richard Ternullo

Date	# of animals	Location	OBS
	GRAY WHALE		
2/1	20	1 trip	
2/2	19	2 trips	
2/3	10	2 trips	
2/4	65	2 trips	
2/5	20	1 trip	
2/8	26	1 trip	
2/10	26	2 trips	
2/11	16	1trip	
2/12	24	1 trip	
2/13	12	1 trip	
2/13	12	1 trip	
2/15	8	1trip	
2/16	18	2 trips	
2/16	13	1 trip	
2/29	5	1 trip	
2 /18	28	2 trips	
2/19	5	1 trip	
2/20	9		
2/21	8	1 trip	
2/25	28	2trip	
2/24	21		
2/24	12		
2/27	12	1 trip	
2/28	15		
2/18			
	KILLER WHALE		
2/23	DF		
2/3	9	3 mi W Bixby Crk.	HN
2/4	4		
2/13	2		
2/13	2	Near MLA Bouy	BC
2/15	2	Near MBARI Bouy	
2/16	8		
2/17	1	Granite Canyon	Jodie
2/25	3	Granite Canyon	?

RISSO'S DOLPHIN

2/09	50	Near Monterey Breakwater	HN
2/17	20		
2/28	22		
2/28	800		

PACIFIC WHITE-SIDED DOLPHIN

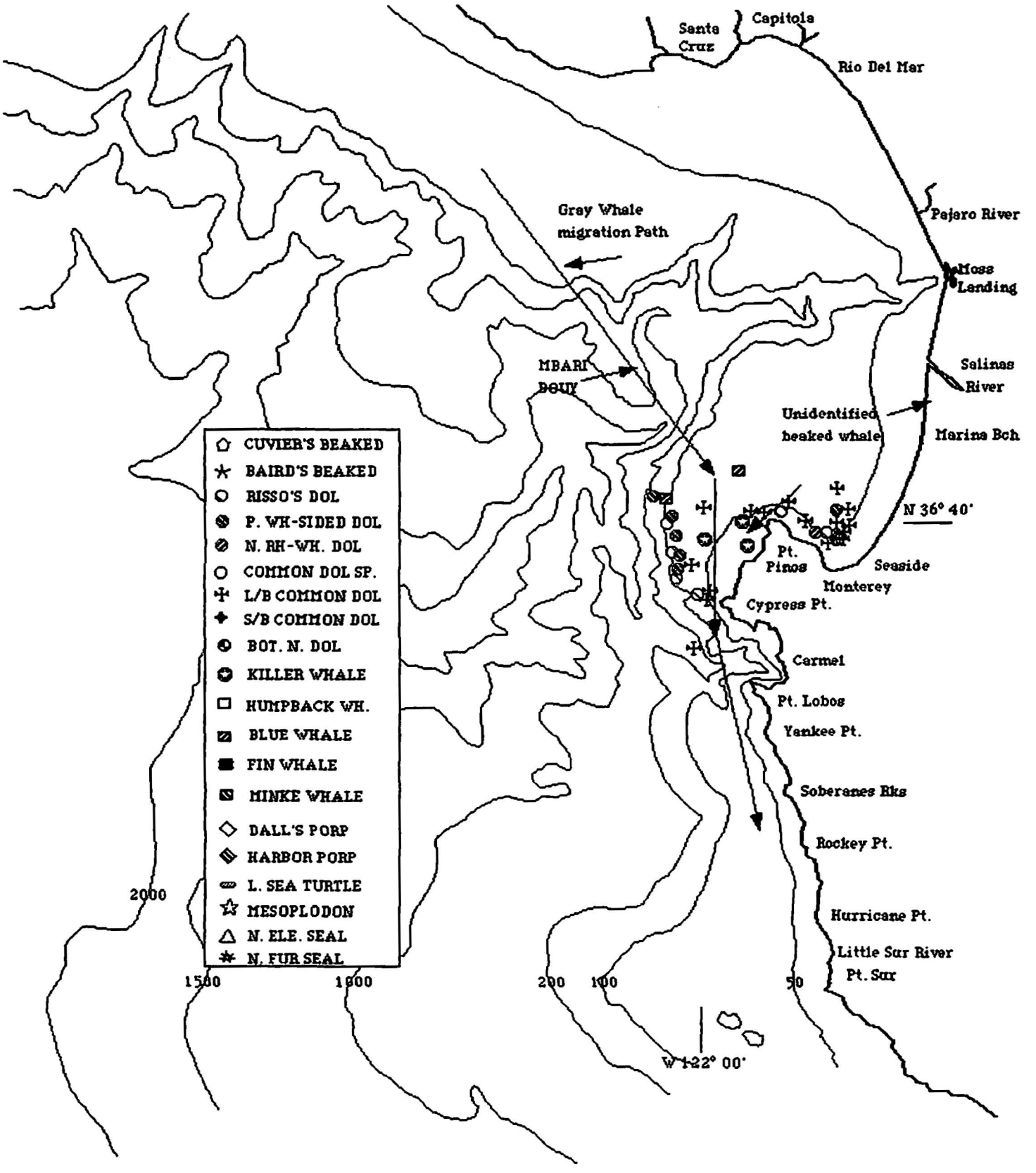
2/04	600	3.5 mi W Pt. Piños	MBW
2/14	3000	4.5 mi W Pt. Piños	MBW

.Associated with 400 **NORTHERN RIGHT WHALE DOLPHIN**

LONG-BEAKED COMMON DOLPHIN

2/2	200		
2/2	1000	Monterey Breakwater	LO
2/4	2000	2 mi N Monterey	TL
2/5	800		
2/5	800		
2 /11	700		
2/13	150	4 mi WNW Monterey	TL
2/14	2		
2/16	4		
2/16	800		
2/17	3000	Near Pt. Lobos	MBW
2/25	500	RO	Asilomar Bch
2/16	40		
2/25	500		
2/26	800		
2/27	800		
2/28	300	BC	

BC, B. Cutter, DF,T. Frank Jodie?, TL, T. Lorenz, MBW, Monterey Bay Whale Watch, HN,H. Neece, LO, L.Oiver


Santa Cruz
Capitola
Rio Del Mar
Pajaro River
Moss Landing
Gray Whale migration Path
MBARI BOUY
Salinas River
Unidentified beaked whale
Marina Bch
N 36° 40'
Pt. Pinos
Seaside
Monterey
Cypress Pt.
Carmel
Pt. Lobos
Yankee Pt.
Soberanes Rks
Rockey Pt.
Hurricane Pt.
Little Sur River
Pt. Sur
W 122° 00'
CUVIER'S BEAKED
BAIRD'S BEAKED
RISSO'S DOL
P. WH-SIDED DOL
N. RH-WH. DOL
COMMON DOL SP.
L/B COMMON DOL
S/B COMMON DOL
BOT. N. DOL
KILLER WHALE
HUMPBACK WH.
BLUE WHALE
FIN WHALE
MINKE WHALE
DALL'S PORP
HARBOR PORP
L. SEA TURTLE
MESOPLODON
N. ELE. SEAL
N. FUR SEAL
2000
1500
1000
200
100
50

AROUND THE BAY

Annual Gray Whale Fundraiser
On Monday January 15th (Martin Luther King Day), approximately 65 participants and naturalists gathered for an 8 a.m. departure from Monterey Sport Fishing's dock for a two hour trip on the large, comfortable Magnum Force, skippered by Captain Leon Oliver.

We were fortunate in having only moderate seas with no wind to deal with, following several stormy days.

The south bound Gray whales were widely scattered, mostly single individuals or pairs and well offshore from Point Pinos. We eventually found a pod of four animals and Captain Leon was able to position the vessel for excellent viewing. We tracked this group through several series of surfacings and soundings. Total Grays seen 12-14.

Other marine mammals observed included the customary California sea lions packing the Coast Guard Breakwater. Closer looks revealed at least one individual with a large piece of fishing net around its neck. Single Harbor seals were swimming in the outer harbor and in the kelp beds off Cannery Row. A single group pf Southern sea otters was resting and slowly rolling in the kelp bed off the Plaza Hotel on Cannery Row.

Bird species observed included:
Northern fulmar
Black-vented shearwater
Brown pelican
Red phalarope - blown inshore by previous days of strong winds.
Common murre
Pigeon guillemot
Cassin's auklet
Rhinoceros auklet
Clear water allowed good views of numerous jellies including:
Purple-striped (*Pelagia*)
Moon jelly (*Aurelia*)
Sea nettle (*Chrysaora*)

Thanks to the following naturalists: Jerry Loomis, Katherine Whitaker, and to Monterey Sport Fishing, Angelo Shake, Captain Leon Oliver and deck hand A.J.

This trip raised $1200 for ACS/MB Graduate Student Research Awards.

Submitted by Alan Baldridge.

Upwelling Season Begins in Monterey Bay
March means it is spring and spring brings with it our coastal oceanographic known as the upwelling period. Also known as the cold water phase, which occurs from spring to later summer when cooled upwelled waters prevail in Monterey Bay. Sea surface temperature usually range from 50-55 degrees Fahrenheit. Our upwelling phase signals the time of tremendous productivity in Monterey Bay and elsewhere in California. Cold nutrient rich waters enhanced by strong northwesterly winds well up to the surface and results in high primary productivity. Plankton blooms are associated with upwelling which feeds the prodigious numbers of marine animals that frequent Monterey Bay in the spring, summer and fall months.

New Exhibits to Open at Monterey Bay Aquarium: "Vanishing Wildlife" & "Saving Seahorses". On May 19 the Aquarium will open its newest permanent exhibits. The "Vanishing Wildlife" exhibit will feature tuna, turtles, and sharks For the first time you will be able to see through a window 25 feet long by 10 feet high and stand both eye to eye and underneath these remarkable ocean animals. "Saving Seahorses" will feature half a dozen live exhibits including tigertail, big belly, long snout and dwarf seahorses.

New Arrivals at the Monterey Bay Aquarium. Four Seven-Gill Sharks and one Six-Gill Shark have been added to the Monterey Bay Aquarium Habitats Exhibit. A lead line curtain has been deployed near the wharf pilings area while the sharks continue to acclimate the exhibit. MBA staff collected the sharks from the San Francisco Bay using hook and line. Also added to the waters of the Outer Bay exhibit are two Scalloped Hammerhead sharks caught by shark researchers last summer in the waters off Oahu, Hawaii, when they were less than one year old. The sharks were flow across the Pacific to Monterey and kept at Hopkins Marine Station until they were big enough to be put side by side with the big tuna. The sharks grow to a length of 12 feet and normally aren't found any further north than Santa Barbara. Scalloped Hammerheads are know to school in the hundreds over oceanic seamounts. A good place to encounter them is La Paz, Mexico.

Tag A Giant (TAG) Tuna Project. This ongoing project is focused on gathering scientific data that will provide information necessary to solving critical stock structure issues surrounding bluefin tuna. Researchers from Stanford University's Hopkins Marine Station, Monterey Bay Aquarium and National Marine Fisheries Service have tagged over four-hundred Atlantic bluefin tuna with an electric tag. This remarkable scientific endeavor has been made possible by continuing cooperation between scientists, recreational and commercial fishermen, and personnel involved in the bluefin tuna fishery. To adopt a tuna or for more information visit the website at: www.tunaresearch.org

Save Our Seas Marine Conservation Public Forum Series Gets Off to a Great Start, *by Tony Lorenz*
On March 7, 2001, three eminent scientists delved into the health of our oceans and what can be done to help protect our ocean planet and the marvelous wildlife that lives there. **Dr. Jane Lubchenco**, a distinguished Professor of Zoology at Oregon State University began the forum with the idea of establishing more marine reserves around the world, that is, areas that are completely protected from all extractive processes. A study of 89 marine reserves around the world concluded that marine life within the reserves quickly bounces back when protected. Fish populations double, fish size doubles, and reproduction triples. Yet, less that one-percent of our oceans worldwide are designated marine reserves. Dr. Lubchenco proposed that 30-50% of our oceans be designated as marine reserves.

Our second speaker was **Dr. Roger Payne**, co-discoverer of Humpback whale songs, and Founder and President of the Ocean Alliance Conservation Group. Dr. Payne shared his 30 years among whales; his revelations about cetaceans were profound and staggering. Dr. Payne revealed that cetacean tissues and blubber have PCB contaminants measuring in the several hundred to several thousand parts per million, including Killer whales in the Pacific Northwest who have PCB contamination at 400 parts per million and some Bottlenose dolphins who have levels at 6800 parts per million. Some marine mammals are swimming toxic dump sites and may become extinct in our lifetimes. Never before in the history of life on earth has one species among so many millions of other species been so preoccupied with destroying the place we and others call home. Yet after conveying a plethora of mind boggling statistics Dr. Payne concluded there is reason for hope saying that people can change in the most basic of ways, practically overnight; our generation can be celebrated and revered ancestors but we must act now before it is too late.

Dr. **Mike Orback**, director of the Duke University Marine Lab and the Coastal Environmental Management Program, was the third and final speaker. Dr. Orback is a cultural anthropologist and emphasized that any possible solution to ocean conservation issues will have to be a social solution. He emphasized that society and not science will solve our predicament. Science, he said, gives us the facts about things, for example how big a blue whale or tuna is, what it eats, where it migrates, how long it lives, and how many there are, and so on, telling us what is going on in the world. It will be up to society to establish what we value, how we behave, what is ethical, and what should be protected and preserved. Considering that there are now six billion humans and less than one percent have contact with the ocean it will be in the power of human communities worldwide to save our seas. We need a concept, a plan to protect the oceans. People are best a conserving things they know about.

Tickets are still available for Series Number 2, which will be held at the Monterey Bay Aquarium on Wednesday, April 18, 2001, from 7-9pm.

April 18
Marine Conservation Public Forum Series: "Saving Our Seas" at the Monterey Bay Aquarium. 7-9pm Series 2: Back to the Future: "True Tales of Past Abundance" featuring speakers Dr. Milton Love, Dr. Jim Estes and Dr. Jim Lichatowich. Call Monterey Bay National Marine Sanctuary at 831-647-4201, or see www.mbnms.noaa.gov.

CONSERVATION NOTES

Orca Calf Spotted in Pacific Northwest
An Orca calf first spotted January 10, 2001, has been confirmed by the Center for Whale Research as the new baby of J-14 (named "Samish"). The calf has been identified as J-37; gender is so far unknown. This is the third calf for the 27 year old Samish. Her first calf J-23 was born in 1987 and died four years later. In 1995 Samish gave birth to J-30 ("Riptide") still living and assumed to be male. As was reported last month in the reprint of Michael Kundu's article "Northwest Orca Populations are Declining" southern resident orca populations have declined 14% since January 1999. Only 83 orcas remain, so the birth and survival of a calf is significant and celebrated.

Whales Beach Themselves near Tokyo
Surfers and local residents found fifty melon headed whales ashore on Hasaki Beach about 54 miles east of Tokyo in late February. About 20 of the whales died, while 28 survived and went back to sea; the other two were taken by the Oarai Aquarium in Ibaraki. The whales were a part of a group of 300 which had recently appeared on the coast of Japan; the whales are usually found farther south near the Phillippines, particularly near Cebu Island. Melon headed whales have worldwide distribution in tropical and subtropical waters. Sightings have been reported from the west coast of Central America, Hawaii, the Maquesas, Tuamotus, Australia, the Maldive Islands, the Seychelle Islands and the pelagic waters of the equatorial belt in the tropical eastern and central Pacific.

Acoustic Bouy and Multibeam Radar Research Hoped to Protect Northern Right Whales
Of the 46 Right whales known to have died since 1976, 15 have been killed in collisions with ships. Efforts are being made to avoid such collisions. A system of passive acoustic monitoring buoys are being deployed along the north Atlantic coast with the assistance of Cornell University and the Center for Coastal Studies (CCS) in order to record Right whale calls and ship noise. It is hoped that the data gathered from the buoys will provide information key to the survival of this highly endangered, great whale species when scientists retrieve the buoys by activating an automatic release system. In addition, in Cape Cod Bay University of Rhode Island researchers have been experimenting with a multibeam radar system designed to be placed at the bow of ships to detect underwater targets 45 degrees ahead on either side of the bow out to a distance of 1 mile. The Northern Right whales are highly susceptible to vessel strikes, as shipping lanes cut through the whales' critical near shore habitat.

Northern Right Whale Baby Boom
Researchers are thrilled to report that that they have found 24 surviving Northern Right whale calves this year, a record number and good news for one of the world's most endangered large mammals. The population of the Northern Right whale found in the North Atlantic is estimated to be about 350 individuals. The calves were counted off the Florida and Georgia coasts. Researchers indicate that the increase in surviving offspring may be a result of the rich summer plankton production and pre-natal nutrition.

Recreational Set Netting Causing Hector's Dolphin Deaths
Recreational fishers in Canterbury, New Zealand have been asked to stop using set nets (similar to a gill net) to help prevent deaths of endangered Hector's dolphins. It was reported that in the first months of 2001 four Hector's dolphins had been found showing signs they had been caught in set nets. Hector's dolphin inhabit coastal waters of New Zealand between Bay of Islands and Foveaux Strait. Usually it is found within eight kilometers of shore and in water less than 80 meters deep. The Banks Peninsula area and Cloudy Bay are said to be especially good spots for sighting the species.

Great News for Anchovies and Marine Life
In a one vote margin with two abstentions a proposal by a commercial netter was defeated that would have allowed large quantities of anchovies to be netted for fertilizer off the San Francisco coast including the Farallon Islands National Wildlife Refuge, a marine reserve close to commercial fishing. As part of nature's way 65% of the entire population of anchovies dies each year as forage for other marine species. Anchovies are the primary food for marine mammals, seabirds and fish. That is why commercial netting of large numbers of anchovies has never been permitted in the Farallon Islands Marine Sanctuary.

The Farallon Islands mark the edge of one of the richest marine environments anywhere from Alaska to Mexico. The key is the underwater shelf that extends 25 miles from San Francisco to the Farallons, a relatively shallow area that is perfect in the spring and early summer for ocean upwelling which brings cold nutrient rich waters to the surface. That allows tiny organisms to be born in great numbers, especially plankton that in turn anchovies feed on. They are the building blocks for the marine food chain.

UPCOMING EVENTS & TRIPS

Now until April 30

Elephant Seals at Año Nuevo State Reserve

20 miles north of Santa Cruz on State Highway One. For fee info & reservations far in advance, call 800-444-7275 or show up and hope for a cancellation. Observe elephant seal breeding season. Guided walk only.

Elephant Seals at Piedras Blancas

Just south of Piedras Blancas Lighthouse on State Highway One. Exercise caution when parking. Be careful and respectful of animals. Guided walk only.

Now through mid-May

Point Sur Lighthouse Guided Tours. Saturday 10am & 2pm. Sunday 10am. Watch northbound migrating gray whales from the spectacular Big Sur coastline from the Point Sur Lighthouse. Volunteer led three-hour walks on paved roads less than a one-mile distance with steep rise in elevation of 360 feet and two staircases of 40 and 50 steps each. For information call 625-4419.

2001 ACS National Whale Watching in Baja

San Ignacio Lagoon Base Camp, *March 2001 -- 5* day land based adventure; fly from/return to San Diego.
For reservations/information, WHALEADVENTURES@prodigy.net, write to ACS Whale Adventures, 801 Stanley Ave., Long Beach CA 90804, or call 562-438-8960. For more information on ACS Baja trips visit http://www.acsonline.org/cruises.htm

March 23-25

Santa Barbara 7th Annual Whale Festival

Opening events in evening on 23rd. 10am to 5pm on 24th-25th. State Street from the train station to the waterfront in downtown Santa Barbara. Parade, food art and crafts, including marine artwork by Peter Folkens, George Sumner and Bud Bottoms. Call 800-897-3187 for information.

April 6

Don Croll, UC Santa Cruz "Marine Mammals and Coastal Oceanography." Seminar Room, Moss Landing Marine Laboratories, 4:00pm.

April 14

Seminar: Bridging the Gulf between Fishermen and Scientists, Speaker: David Dobbs will provide a fresh perspective on how we view our local fishery. Monterey Bay Aquarium 7pm.. Call Aron King 647-4257.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

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☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

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Make checks payable to: **ACS/Monterey Bay Chapter**

Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

UPCOMING EVENTS AND TRIPS, continued.

April 18

Marine Conservation Public Forum Series: "Saving Our Seas" at the Monterey Bay Aquarium. 7-9pm Series 2: Back to the Future: "True Tales of Past Abundance" featuring speakers Dr. Milton Love, Dr. Jim Estes and Dr. Jim Lichatowich. Call Monterey Bay National Marine Sanctuary at 831-647-4201, or see www.mbnms.noaa.gov.

April 28, September 9, November 3

24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to observe Sperm, Fin, Gray and Beaked whales, possibly Pilot whales and offshore dolphin species, as well as winter pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or E-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

May 6-10

European Cetacean Society ANNUAL Meeting
Rome ITALY www.webinter.nl.net/users/jwbroekema/acs

May 20

Farallon Islands Marine Biology Cruise, California Academy of Sciences. 7:15am-3:30pm, $70. The Gulf of the Farallons National Marine Sanctuary is a remarkably rich marine environment home to a wide array of migrating fish, birds and marine mammals. Cruise aboard a sixty-five foot fishing boat to the abundant wildlife characterizing this marine sanctuary.

May 21-24

52nd Tuna Conference, University of California, Lake Arrowhead Conference Center
www.swfcsc.ucsd.edu/tunaconf.htmlsmm

March 30-April 1

The Southeast and Mid Atlantic Marine Mammal Symposium, Duke Univ. Marine Laboratory, Beaufort NC Visit the website at http://kogia.ml.duke.edu

Nov. 28-Dec.3

14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconfernce.org

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Monterey Bay Chapter
P.O. Box HE
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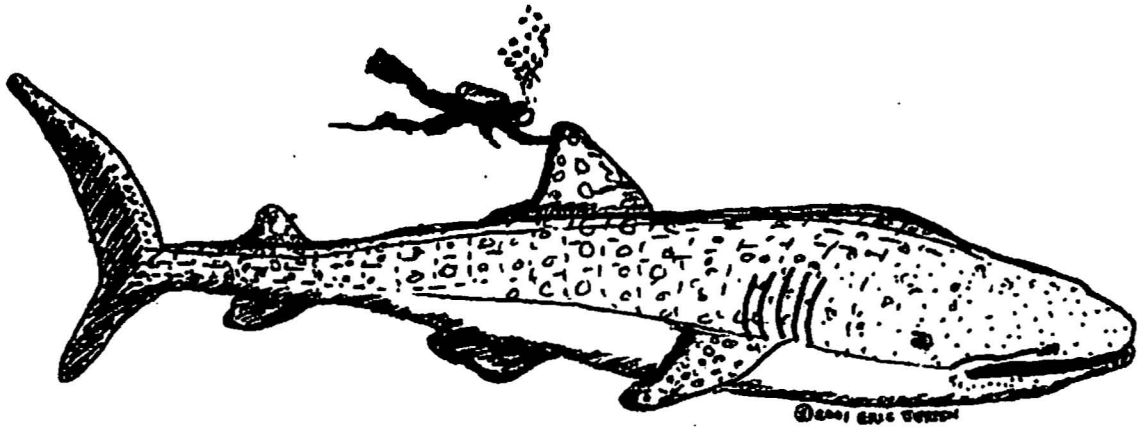
Soundings

American Cetacean Society ~ Monterey Bay Chapter **April 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER
Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building
(Across from the American Tin Cannery Outlet Stores)



Rhincodon typus

Date/Time: Thursday, April 26th, 7:30 p.m.
Speaker: John O'Sullivan, Monterey Bay Aquarium
Title: Whale Sharks: their natural history, biology and conservation

With a size known to reach around 50 feet and plankton feeding habits which are similar to a medium size baleen whale, whale sharks are the worlds largest known fish.

They were virtually unstudied scientifically until recent years when shark biologists turned their attention to them, as ecotourism, snorkeling and scuba developed around them in a few accessible areas where they are consistently found. These locations include the Sea of Cortez (Cabo San Lucas and Bahia de Los Angeles), Brazil and Western Australia. Shark specialists from these and other countries recently assembled in La Paz, Baja California for the first International Symposium on whale sharks. Our speaker, who attended this meeting, has been observing these animals during his annual visits to Bahia de Los Angeles for many years.

In view of the near absence of published evidence indicating their occurence in California waters, some unpublished sightings in the Monterey Bay region from aerial surveys for marine mammals have emerged and are of special interest.

Our speaker will discuss their evolution, behavior and distribution, and conservation issues. John is a Senior Collector at the Aquarium and is known to be an informative and entertaining speaker. Please join us for a special chance to learn about this little known and fascinating "honorary marine mammal".

From the Editor...Tony Lorenz

In his award winning, critically acclaimed book, *Song for the Blue Ocean*, marine ecologist Carl Safina of the National Audubon Society writes that the oceans - those vast well springs from which all life on earth originated - are in a crisis which will shape human existence. While the attitude of "manifest destiny" diminished on land a century ago, the reckoning of its havoc in the ocean is only just beginning.

Humans are literally eating some fish species into oblivion. Some cod populations are considered commercially extinct. Bluefin and Albacore tuna are overfished in the Atlantic. Flounder are in trouble, along with Atlantic halibut. The average size of swordfish being caught in the Atlantic is only 90 pounds, down from 250 pounds ten years ago! Salmon, haddock, Gulf shrimp, orange roughy, Patagonian toothfish (often sold as Chilean Sea Bass) are in serious decline. Dredging for oysters and clams is tantamount to clear cutting the ocean floor.

If a fish population is not being over harvested it may be falling victim to bycatch - the problem of untargeted species that are caught and killed in nets and on hooks. There are secondary impacts too. When one fish species is depleted it can have disastrous consequences for its predator species such marine mammals. Anecdotal evidence suggests that even slight overfishing of pollock in Alaska may affect Stellar's sea lions and sea birds that feed on the young fish.

Scientists estimate that 80-98% of billfish mortality is caused by long-lining, a fishing technique that deploys thousands of baited hooks from a long line sometimes extending 50-80 miles in length. In addition to the intended catch of swordfish or tuna, these long lines routinely hook dozens of species as untargeted bycatch. Long-lining for example has had catastrophic effects on blue and white marlin, sea turtles and albatross.

In California waters some species of much sought after abalone are on the verge of extinction. Rockfish fisheries are closed for 2-4 months per year to allow populations to rebound. Some salmon runs are endangered or on the verge of collapse. Sharks and swordfish have been gill netted to perilously low population levels. Marine mammal and seabird species are also routinely caught in gill nets, some legal, some illegal.

The repercussions of overfishing are having dire consequences on marine food chains. Resident killer whales from Washington State visited Monterey Peninsula waters last year probably in search of salmon because their salmon prey in the Northwest has been severely depleted. Other fish species in the

Reader contribution of articles, announcements, poems, scanned photographs or other printable items related to cetaceans is welcomed and encouraged. Please email editor at tonylorenz@redshift.com or send your submission to ACS, Attn: ACS Editor, PO Box HE, Pacific Grove 93950.

Pacific Northwest and Alaska are disappearing, affecting not only Orcas, but also pinniped and sea bird populations. Squid fisheries in California and worldwide are unregulated and may be in danger of over harvesting. Squid is one of the most important prey species for numerous cetaceans, pinnipeds, fish and seabirds. Bluefin tuna populations on the eastern seaboard of the US are under tremendous pressure from not only US fisherman, but from Japanese fish markets who pay upwards of $100,000 for a single fish. Bluefin tuna during its life history is probably an important prey species for killer whales and sharks. Swordfish in the Atlantic and Pacific are preyed upon by Mako Sharks. What happens if swordfish disappear? What is the intrinsic value of Orcas, tuna and swordfish?

The list of catastrophic scenarios and potential scenarios could fill a tome. So, what can we do to help prevent overfishing and plundering of the oceans?

(1) We need what Carl Safina calls a "sea ethic". He describes that just as the land ethic grew into the conservation and environmental conscience of the late 20th century, the sea ethic will logically expand our views of marine wildlife and its values throughout the oceans. To embrace a sea ethic is to embrace the sea's living inhabitants. To see them for the first time as wild animals in their habitats, confronted with needs and dangers, equipped by evolution with the capacity and drive to adapt and survive.

(2) Be a conscientious consumer - vote with your money. The Marine Stewardship Council has developed a process to certify sustainable fisheries. We can go to the grocery store or order something off a restaurant menu and seek out seafood that was not harvested in a destructive manner. In Cape Cod, Massachusetts, the Commercial Hook Fishermen's Association is working with its members and local businesses to market hook caught fish as opposed to fish caught in trawl nets that can rake the ocean floor and pummel everything in its path. In Santa Cruz, California, Dave's hook and line caught tuna and salmon, which are dolphin safe, give us a sustainable option. Whole Foods Market works in collaboration with the Marine Stewardship Council and the Monterey Bay Aquarium, and its fish comes from sustainable fisheries and methods. Sea Harvest Fish Market of Monterey and Carmel also offers sustainable choices. Sustainable choices include dungeness crab, Monterey spot prawn, albacore, wild caught king salmon and west coast farm raised oysters.

(3) Marine reserves and no-take zones should be established . Last summer NMFS announced that it was closing more than 100,000 square miles of swordfish nurseries in the Gulf of Mexico and the Atlantic Ocean. This closure came in the wake of a similar action imposed in Pacific waters to protect sea turtles killed as bycatch of swordfish fishing. And it foreshadowed a similar proposed turtle related closure in the Grand Banks off New England and Canada where 25% of Atlantic swordfish are caught. In southern California at East Anacapa Island there has been a no-take marine refuge around the island for many years, and fish and invertebrate populations are flourishing. In December 2000, former President Clinton issued an executive order creating the Northwest Hawaiian Islands Coral Reef Reserve, a 1200 mile stretch of uninhabited islands northwest of Honolulu. Those reefs account for 70% of corals in the US and are critical habitat to the survival of fish populations, sea turtles, and the Hawaiian Monk Seal which is found no where else on earth.

The challenge and opportunity to cherish and protect life in the sea is before us. With our spirits, minds and hearts, we can restore the sea to its former abundance.

Recommended Reading

Song for the Blue Ocean (Henry Holt and Company, 1997) by Carl Safina, winner of the Lannan Literary Award for non-fiction. Perhaps the most compelling, provocative, informative and readable book ever on ocean conservation.

Seafood Lover's Almanac (National Audubon Society, 2000) Editor: Mercedes Lee, Contributors: Suzanne Ludicello and Carl Safina. Fun and educational book with important up to date information on what seafood is safe to eat and what should be avoided. Species illustrations and life histories make this book enjoyable for the whole family.

CONSERVATION NOTES

Whale Shark Conservation. Shark Research Institute and Whale Shark Research Group dedicated to saving whale sharks. From DNA sampling to assistance from volunteer divers these two groups are working diligently on protecting whale sharks from hunters. To learn more visit www.sharks.org and www.whaleshark.org.

Dolphin Center Opens. The nonprofit Oceanic Society has opened the Belize Center for Dolphin Research and Environmental Education on Blackbird Caye. A variety of programs will fill the needs and interests of researchers, educators, students and the public. For information call the Oceanic Society at 800-326-7491.

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Sea Chanteys & River Songs

Whales and the sea have inspired music and art for centuries in many cultures, including the hardy men who went to sea for 2-5 years at a time on whaling vessels and other sea going ventures.

On Saturday, May 5 at 8pm, and Sunday, May 6 at 3pm at the Golden Bough Theater, Monte Verde & 8th in Carmel, the Monterey Peninsula Choral Society, along with the Children's Chorus, will perform sea chanteys and river songs, including songs about whaling, and life at sea and along the shore. Lively performances and a varied selection of music will delight all. Come experience music inspired by water and whales. The nonprofit Monterey Peninsula Choral Society has been providing splendid choral music to visitors and residents of the Peninsula for over 20 years.

$18/reserved; $12/general admission; $6/children under 12. Tickets are available at the Thunderbird Bookstore, Kingdom Come Books, Bookmark and Bay Books, or by calling 831-625-3237.

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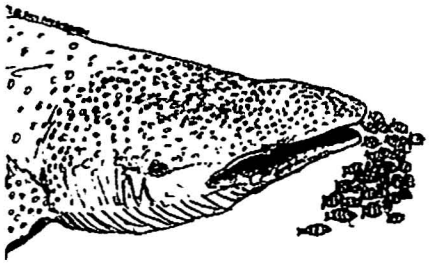

Sonata For Humpback Whales. Two separate studies and reports by biologist Jelle Ateme from Woods Hole and Dr. Peter Grey with the National Academy of Sciences emphasizes that humans hold no copyright on sonic brilliance, and that a number of nonhuman animals produce what can rightly be called music, rather than random drills, trills and cacophony. Recent in depth analyses of the songs sung by humpback whales and birds show that even when their vocal apparatus would allow them to do otherwise, the animals converge on the same acoustic and aesthetic choices and abide by the same laws of sonic composition as those preferred by musicians and human ears.

Humpback whales, who spend six months of the year doing little other than singing, use rhythm similar to those found in human music and musical phrases of similar length -- a few seconds. Whales are capable of vocalizing over a range of at least seven octaves, yet they tend to proceed through in stepwise, lilting, musical intervals rather than careening madly from octave to octave – in other words they sing in key. They mix percussion and pure tunes in a ratio consonant with that heard in much of western symphonic music.

Humpback songs contain refrains that rhyme. This suggests that whales use rhyme in the same way we do, as a mnemonic device to help them remember complex material. "It is very easy to play along with pure unedited whale songs" said Dr. Grey who has written movements for saxophone, piano and whale. "They're absolutely comprehensible to us." "Music is far older than our species, " said Dr. Roger Payne, President of the Ocean Alliance in Lincoln, Massachusetts, and co-author of one of the papers. "It is tens of millions of years old and the fact that animals as widely different as humans and whales come out with similar laws for what they compose suggests to me that there are a finite number of musical sounds that will entertain the vertebrate brain."

Fishermen & Scientists Debate Over No Take Zones. A 15 member panel of scientists headed by Stanford University biologist Joan Roughgarden debated no fishing zones in the waters of the Channel Islands National Marine Sanctuary. The group is studying four scenarios for no fishing zones covering from 9% to 50% of marine sanctuary waters. During a meeting on March 21st at Fess Parkers Doubletree Resort in Santa Barbara the panel of scientists said a 9% set aside would fail to conserve underwater habitats or replenish the dwindling populations of fish outside reserve boundaries. At the same time, the scientists said a no fishing zone extending over 50% of the sanctuary would hit fishermen too hard. The best option, the scientists indicated, would be between 30% and 39% spread in blocks around the five islands of the Channel Islands National Park.

A citizens group made up of 18 fishermen, environmentalists and government officials has been working on a proposal for no fishing zones for more than a year and are expected to choose one on April 18th for consideration by the sanctuary. The State Fish & Game Commission will have the final say. Five thousand people from Monterey to San Diego are employed fishing around the islands, cumulatively earning about $190 million per year. Scientists told fishermen and the citizens group that fishermen in the Florida Keys did not go out of business in 1997 when a nine square mile ecological reserve was established to protect the coral reefs. On the contrary, the lobstermen's incomes have increased each year, despite two hurricanes in the area.

Wandering Albatross Listed as Endangered in Australia. Twenty species of Albatross are on the red list of the International Union for the Conservation of Nature. Longline boats are having devastating consequences on albatross populations worldwide. Nets that are 5 to 80 miles long are baited with thousands of hooks. When the line is released behind the boat, the birds try and snatch the bait before the line sinks. Sometimes they get hooked and drown. During the 1980s and into the 1990s hungry albatross found a lot of dead squid and fish tangled in drift nets which were 30 to 40 miles long and hung down 40 feet into the ocean. Some 4,400 Black footed Albatross and 17,500 Laysan Albatross were killed each year until the United Nations outlawed the nets in 1993.

Long liners can fish without killing albatross. Fisherman in Alaska, for instance, use a series of streamers that scare the albatrosses away from the bait until the bait sinks out of reach, The Alaskan fishermen initiated the regulations themselves. They feared closure of their fishery if too many Short tailed albatross were killed; they also felt that protecting the birds was the right thing to do. Both Black footed and Laysan albatross forage in Monterey Bay National Marine Sanctuary. Black footed albatross can be seen year round and reach their peak aggregations from May through July.

ALBATROSS WANDERINGS

By Carl Safina

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When 1.2 million birds of the same species breed on a few tiny islands, how do they find food? If they're albatrosses, they take to the sky. Scientists tracked one mother who flew 38,706 miles in four months to feed her chick.

I have to say, the bird I'm trying to admire is not the most engaging one I've ever met. She's been sitting on her single egg for nearly two weeks now -- there are nests on the ground all around us -- and incubating albatrosses seem detached from reality. In a place without predators, they need not remain alert. And they're not interested in you. They just sit, day upon week.

Perhaps this one's dreaming of the glorious day when her mate will relieve her, when she'll spread her wings and sail across the lagoon, beyond the reef's towering breakers, out upon the open ocean, and...

What happens next is the unbelieveable part. The new findings have staggered ornithologists. Albatrosses endure a life so extreme that until recently it was scarcely imagined. But now we're beginning to (continued on page 6)

understand this life better, thanks to Wake Forest University professor Dave Anderson and graduate student Patty Fernández. For the past two years they've been working here on Tern Island—a tiny speck roughly 500 miles northwest of Honolulu—using satellite-tracking transmitters to discover where Hawaiian albatrosses go during their breeding season.

NESTING ALBATROSSES COVER LONGER distances when foraging than any other bird. In fact, almost everything about them is long. Their long, narrow wings make them long-distance gliding machines. Wandering and royal albatrosses wield the longest wingspans in nature—about 11 feet each. Their reproductive cycle is long, too. The two albatross species that nest on Tern Island, the black-footed and the Laysan, don't begin breeding until they're eight years old. Courtship lasts two full years, and the breeding season stretches eight months—longer in some species. Eggs are incubated for about two months. Males and females incubate in shifts as long as three weeks. The death of a mate costs the survivor one full breeding cycle, and many healthy breeders nest only every other year. A chick may pip the egg for as long as six days before finally emerging. A large chick may wait two weeks for a meal. After fledging, young albatrosses remain at sea for several years, never landing upon a solid surface, perhaps not even glimpsing land. With good luck, an albatross may live five decades or longer.

Not least of their lengthy attributes is the distance one must go to see them nesting. The roughly two dozen albatross species (the taxonomy is unsettled) inhabit all oceans except the Arctic and the North Atlantic. The Hawaiian Islands are the most geographically isolated in the world, and the most isolated parts of the archipelago are the Leeward, or Northwest Hawaiian, Islands, which stretch in dots and dabs for 1,200 miles northwest of what we think of as Hawaii. The Hawaiian Islands National Wildlife Refuge was established by executive order of President Theodore Roosevelt in 1909, to protect the birds from plume hunters, egg collectors, and guano miners. Plume hunters alone killed millions of albatrosses in the North Pacific. Now these tiny islands are crammed with 14 million birds of 19 species, including some 60,000 black-footed and 600,000 Laysan albatross pairs—virtually the entire breeding populations of those species.

Tern Island is part of an atoll called French Frigate Shoals. Arriving by air, this world seems elemental: a blue disk of sky above, a blue disk of sea below, and clouds creamed between—a seabird's world. Three hours from Honolulu with the morning sun behind you, French Frigate Shoals appears as a turquoise smudge in that blue ocean. Waves break into lacy foam on its 17-mile semicircle of reef and sandy islands.

Tern is an odd little island, less than a mile long and perhaps an eighth of a mile wide, militarily modified during World War II to serve as a kind of terrestrial aircraft carrier. Its middle third is all runway, its two outer thirds all bird colony. Most of the "shoreline" is a low wall of rusty metal. But as the plane door opens, this artificial aspect vanishes amid the dazzling action of seabirds by the tens of thousands and the din and dancing of courting albatrosses.

Most of the albatrosses arrive here in November, the males about a week before the females. When previously mated albatrosses reconnect, they generally skip the prolonged courtship of their youthful past. Well-acquainted mates may copulate within an hour of their reunion. Then they go to sea for about 10 days. The female lays her soda-can-size egg a day after arriving back at the colony. Then she leaves—usually the same day—and the male sits on the egg for three solid weeks, until she returns. Then *he* goes to sea for three weeks. After that it's two weeks on the egg for dad, a week for mom, and five days for dad.

With all those alternating periods of activity and inactivity, the birds' bodily condition fluctuates dramatically. Male Laysans, the more studied of the two albatross species on Tern Island, show up weighing nearly seven and a half pounds; females weigh close to seven. A male loses about half a pound in the first 10 days or so, then regains much of it at sea. When the female lays that big egg, she instantly loses 10 percent of her body weight, but she regains it at sea during the male's first incubation shift. Meanwhile, without food or water, he's getting lighter. Albatrosses with an infertile egg or a no-show mate have incubated for more than 100 days in vain. Once they lose a third of their weight, hunger forces desertion. But in a normal incubation, the chick stages its slow-motion breakout after about 65 days.

The Laysan albatross closest to the barracks where I'm staying is a female with a satellite transmitter on her back; I've begun referring to her as Amelia. Her chick hatches on February 6, while her mate is at sea. When he comes to relieve her three days later, Amelia launches herself from the runway and strikes northward over the reef's breakers. Each day, the satellite interrogates the transmitter, then beams Amelia's coordinates to Anderson's North Carolina laboratory. The transmitter's dialogue with the satellite tells us for certain where she is, how far she flies in which direction, and when she shifts course. But we also know enough to sketch a plausible picture of what she might be doing and experiencing.

AN HOUR AFTER AMELIA LEAVES, THE last visual trace of French Frigate Shoals falls away. Amelia's brain contains a compass—unlike the human brain—and an accurate clock. And, of course, she has those wings. Albatrosses usually spend 80 to 90 percent of their time at sea flying, day and night. What to us is trackless blue ocean is to Amelia a familiar mosaic, riddled with signs. As we know that a supermarket will hold food, children will fill the schoolyard, and a bus will appear at the bus stop, Amelia knows the sea's vast and changing neighborhoods.

She sticks near the sea surface like an oceangoing

bloodhound, sifting scents. She skillfully reads the terns and frigate birds that occasionally cross her line of vision. Terns flying low, in a straight line, have found fish and are commuting. They are worth following. Terns 50 feet above the water are searching, as she is. If it's late in the day, a pod of dolphins is worth following; a hunt may erupt, making fish available. Diving flocks of terns and boobies signal tuna; tuna signal eating-size flying fish, plus a worthwhile area in which to linger after dark for squid. A line of weeds or flotsam—marking the border between two water masses—is the best place to find floating objects with flying fish eggs attached. If the breeze is off a border like this, the wafting scent may tell Amelia of an unseen meal miles away. She knows when to keep going and when patience will pay.

The ocean swells roll and fall away beneath her. Amelia's flight mimics them as she rises 20 feet or so, her belly to the wind, then turns and lets gravity pull her downward and forward like a wind-driven snowflake. Her wing tip etches into the sea, creating a thin track that vanishes in moments. She goes like this for hours, wings quivering against the breeze. She averages 15 miles an hour, double that when the wind blows up. The broodiness gone, she is now keenly alert.

When the wind drops in the late afternoon, Amelia rises on her own power, flapping more than she'd prefer. As her breast muscles pull down the long bones of her wings, thrusting her feathers forward into the air, she uses up more of the energy she's here to replenish. By now she's flown 165 miles east from Tern Island, and by the look of her straight track, she's found nothing. Abruptly, she alters course, from east to northwest.

Most of the night she flies steadily, though half of her brain is asleep. By dawn Amelia is 115 miles due north of Tern Island. All day she searches the sparse tropical sea, working 124 miles westward. The more food she finds, the more she feels that new chick pulling, like a downy rubber band. Nearly 156 miles from Tern Island, after two days at sea, she suddenly sets course directly for home. For 10 hours she sails straight to her unseen nest and baby. It is February 11.

Amelia and her mate exchange brief greetings, and dad leaves on his own overnight foraging foray. Their chick, unveiled to sunshine, lifts its wobbly head and opens its stubby bill to a V. This ritual stimulation makes Amelia retch on cue. She leans forward, centers her gullet on the V, and fills the chick with gooey regurgitated food. Then she settles in to brood.

AMELIA HAS BEEN LOSING WEIGHT SINCE her chick hatched. She's taken four foraging trips, logging 506, 99, 876, and 2,388 miles. Her devotion shows: Her chick has grown vigorous and healthy. But she has put all her surplus energy into the chick, and now she's seriously hungry. She sets out again on February 26, after just a few minutes' rest from her most recent trip. She walks slowly to the runway, turns into the southerly wind, cranks herself into the air, and puts the wind behind her. It's a good start, because this will be a longer trip (see "Amelia's Flight Plan," page 76). The small size of her chick makes her begin by looking for food nearby. For four days Amelia dallies, first heading northwest for 170 miles, then looping back southeast before heading 80 miles northeast. She's not finding much, and she's traveling continuously. For an albatross, it's no way to make a living.

An hour before dawn on March 3, Amelia catches a whiff of something different. It's the smell of fat, very faint. Not blubber, not the feast of a dead whale. This mild aroma is from sea foam, the whipped fat of diatoms whose microscopic bodies have been broken by rough seas. The foam drifts along the border between two water masses in a very subtle line called a drift line. It's invisible in the dark, but the scent is familiar enough, and it rouses Amelia to full wakefulness. She knows from experience that following this smell will eventually yield squid, fish, and fish eggs. She's finally on to something.

Amelia passes through the scent upwind, and the air goes pure salty again. She turns, and the aroma resumes. She begins weaving along its line of origin, hunting in the shine of mid-ocean starlight with eyes nearly as dark-adapted as an owl's.

At the water boundary she sees a few lantern fish, the blinking lights along their bodies flickering signals to one another. They're too small for her to catch, but Amelia knows their presence means squid—squid that have followed the lantern fish 1,000 feet up from the depths since sunset. In the inky water, those puckering hunters will become the hunted.

Amelia sees a small pod of squid rushing the lantern fish, several of them successfully. As the squid maneuver their wriggling victims toward their beaks, they blush to warn their school-mates away from their hard-earned meals. Thus occupied, they fail to detect Amelia's night-cloaked approach.

She plows in heavily, and puffs of ink explode in the water. The squid scatter safely—all but one. As the lantern fish and their pursuers drift downward with the first light, an ailing squid lingers at the surface. Amelia lands and paddles forward, nailing it on her bill.

AT SUNRISE AMELIA IS 400 MILES NORTH of Tern Island and a little east. The shining sea stretches away like a gold-threaded tablecloth. A strong wind has dissipated the drift line to an indistinguishable gradient, scattering anything that would be food. She turns north, then stops to forage almost exactly where she was about a week ago. Her last, marginal trip worked well enough for the chick, but what worked well enough then doesn't work now. It's a week

later, farther into Amelia's hunger and loss of weight. Her devotion to home wavers. Her blood chemistry is signaling to her brain. The long averaging process of natural selection steps in, as though whispering, "No chick benefits from a mother starved to death." The seesaw between maternity and hunger tips, and hunger wins.

Amelia will go for food—real food. She ignores every faint cue from this clear, warm ocean about small snacks or fish eggs here and there. Amelia is no longer foraging. Now she is truly traveling. And she knows exactly where she's headed: due north, to the edge of cold water. For the first time in months, Amelia will fully unfurl.

On a favoring wind, she sails nearly 600 miles in 30 hours. The sea temperature slowly, slowly drops. Amelia crosses out of the Tropical Water Mass, the northward limit of 68-degree Fahrenheit water. Several hours later, she zooms past the Subtropical Frontal Zone, then the Subtropical Central Pacific Water Mass. She's now at the southern border of a major transition zone between the warm-hearted central Pacific and the chill subarctic.

Amelia slows along this edge, 1,000 miles from Tern Island. The cooler water is friendlier to drifting single-celled plants—phytoplankton—and so is greener. It has lost its tropical clarity, and with it the tuna and the tropical seabirds. In six days at sea, Amelia has flown from latitude 23 degrees north to latitude 40 degrees—the distance from southern Baja California to Eureka, California.

She scrutinizes the greener water. She backtracks toward the south, following a 100-mile meander in the current, then loops back as the meander swings north again. But she's still traveling many miles between mouthfuls. She breaks off her search and again swings straight north, skimming wave after wave, until an additional 180 miles of water flow between her and Tern Island. She is now on the northern edge of that broad transition zone called the North Pacific Current.

THIS FOUNTAIN OF CHANGE FLOWS ACROSS the entire northern Pacific Ocean, waving like an unmanned fire hose. It separates the warmer and more saline subtropical water from the cooler and fresher subarctic water. It originates in the western Pacific as the Kuroshio Current, sweeps past Japan, and undulates eastward to Vancouver, British Columbia. It then flows south as the California Current, keeping the coastal ocean cold all the way to southern California.

Amelia is foraging at the Subarctic Front, where the water dips to 54 degrees. The air is chilly. This is the wintry kingdom of fulmar, herring, and salmon. Few marine animals can handle both this world and the solar realm of frigate birds, flying fish, and tuna. But albatrosses do. For the first time since she arrived at Tern Island, Amelia feels fully at home.

She works this zone for five days, searching for concentrated scents, temperature gradients, and other signs of life. She moves west into the current for 225 miles one day, 250 the next. Then, finally, she finds what she's looking for. The water is squirming with squid. Amelia spends three days loading up, putting on weight and storing extra food. With her belly full, the seesaw between maternity and hunger tips again—and this time maternity wins.

She lights out on a compass heading that will take her directly home and flies for 40 hours—600 miles, nonstop. She crosses back into subtropical water and spends a day zigzagging 100 miles to the southwest, probably feeding along a weak front between two water masses. Then she streaks toward Tern Island again. She smells the air growing saltier and warmer as she bores back into the tropics. After an additional 630 miles in 42 hours, she crosses French Frigate Shoals' thundering reef and lands clumsily on Tern Island. It is March 14. After 16 days at sea on a 4,200-mile odyssey, she feels as though her body is still gliding with gusts and swaying to swells. She waddles over and calls to her surprisingly large chick, who immediately responds. "That you?" "Yes, alive."

Amelia hasn't seen her mate in weeks, but by the looks of the chick, dad, too, has been faithful to his duties. The chick is big enough now to be aggressive, and it hasn't been fed in about a week. It practically attacks Amelia, whining and battering her bill with its own hooked beak. Amelia regurgitates a sizable squid and several meaty fish chunks in the first payload. This goes a long way toward filling the chick, which suddenly pauses to swallow the meal, mucousy strings of goo dangling from the corners of its mouth.

After the briefest pause, the chick demands more. This time the meal comes as a liquefied high-calorie oil, stored from food Amelia caught at the beginning of her journey. The noisome oil is unique to albatrosses and their relatives, the petrels and the shearwaters. It squirts from Amelia in a strong brown stream. No chick could ask for more.

But this one does. In maternal devotion, Amelia pours her heart out. The chick quiets, briefly. Her parental duties discharged, Amelia walks away. She surveys the noisy island, the birds of many species crisscrossing overhead, the younger albatrosses courting and dancing with youthful ardor—and no adult responsibilities. Amelia's seen it all before. She registers only that her chick is alive and vigorous, and that means one thing: It will need more food. In a mere 10 minutes she's on the runway, good for takeoff.

IT'S MID-MAY, AND 65 PERCENT OF THE LAYSAN and black-footed albatross eggs laid on Tern Island have hatched chicks that have survived their first three months. The young Laysan albatrosses weigh as much as the first-arriving adult males did, and they're 25 percent heavier than their overworked fathers. For the beleaguered parents, this marks the low point in bodily condition.

On May 27 Amelia returns from a two-week trip of 5,600 miles. Her big chick seems crazed with hunger. This is its last major growth spurt. Its bones are building, as are its thousands upon thousands of feathers. It needs enough nutrients to make those feathers thick, insulating, waterproof, and tough enough to endure a couple of years' punishment in the salt and sun and wind and water.

The chick batters Amelia so aggressively that she tries ducking away at first. But its tantrum stimulates her to disgorge. The chick scissors in, squealing and quivering with excitement. Out comes a large squid. A large flying fish. Fish eggs. Finally, a stream of oil, until Amelia is cleaned out. She rests a few hours. For the moment, life is thick. For her chick, graduation is on the horizon.

But Amelia will not be attending. When she leaves the next day, May 28, her parenting will be finished. Her chick will face whatever lies ahead alone.

As the parents leave Tern Island, the chicks lose weight for the first time. They hunker quietly, conserving energy and water, growing in place like melons. In a couple of weeks, when they begin exercising their wings, they will lose more weight. It's a timed free-fall.

By mid-June Amelia is beyond the North Pacific, on the back side of the Aleutian Islands. This is Albatopia, the promised land, the land of milt and herring—herring swarming to breed, herring injured by whales or nicked by nets, herring whose eggs glow on every strand of kelp like caviar at a wedding. Amelia no longer thinks about her chick, 2,000 miles away.

Back at Tern Island, the albatross chicks have spent the past two weeks exercising their wings, leaping and flapping. Finally, this morning, some other scientists and I are watching fledgers. A chick, lofted by the breeze, leaves the berm for the first time, flapping with all it's got. It lands in the turquoise lagoon. Now begins the usual terror of adolescence: the race between learning and luck.

We're not the only ones gathered for this event. Soon a big, square snout, followed by an awkwardly gaping mouth, breaks the surface two feet from the goose-size fledgling. The bobbing bird peers at it quizzically with wings half opened. In a clumsy rush, the nine-foot tiger shark charges its intended prey—and shoves it aside with its bow wave. The shark turns, and on its next approach the chick, finally alarmed, actually pivots to bite the huge snout, which again misses because of the pillow of water it is generating. The scene plays in excruciating slow motion. With each pass the shark grows more determined, and the chick grows more alarmed. Just ahead of the next oncoming bulge, the chick patters and flaps safely into the air. Several other chicks are bobbing nearby, and when the next fledger hits the water it attracts another big tiger cruising near shore. This chick does not read the message in time, and on the shark's third pass it gets its jaws around the bird's body. The albatross, pecking furiously, vanishes. A slick of oil and some feathers appear at the surface.

In the days that follow, one of 10 fledglings will nourish a tiger shark. That's the deal evolution has made with the albatross: heavy mortality among the young in exchange for long life and extraordinarily high natural rates of adult survival—93 to 95 percent from about age 8 through at least age 20. A lot of albatrosses live much longer, though scientists aren't sure exactly *how* long. Many of the birds now living have been wearing bands for 40 years.

Outside the reef, the atoll's slopes drop away sharply, and less than a mile from the shallow turquoise lagoon, the ocean is so deeply blue that it looks purple. A lone Laysan albatross is paddling those cobalt swells, and only the sleek, uniform darkness of its mantle—no sun-bleached wear and tear—tells me the bird is a freshly minted chick. It opens its perfect wings, the breeze lifts it, and it strides northward on the propelling wind, getting smaller and smaller. If a multitude of luck holds, in a few years it may again swing its feet down to touch dry land.

AROUND THE BAY

The Gulf of the Farallons NMS Celebrates 20 Years. Throughout 2001, the Gulf of the Farallons National Marine Sanctuary will be celebrating its 20th anniversary with a variety of events in the San Francisco Bay Area. Lectures about the Farallon Islands will be given during the rest of the year. To learns more about events for the year long celebration visit www.gfnms.nos.noaa.gov/.

Humpbacks Arrive in the Bay. April has brought with it our coastal upwelling phenomena and with it an abundance of forage in Monterey Bay which includes anchovies and sardines. As 10-20 humpback whales (*Megoptera novaenglia*) have been reported off Moss Landing foraging on anchovies, a good indication that another great year of humpback whale sightings are in store for Monterey Bay. Last year, as many as 130 humpback whales were seen on a single trip with many other trips producing as many as 65-100 per humpback trip. Phenomenal! The latest figures released by Cascadia Research estimated just over 1000 humpback whales over summer in California waters. A good percentage of these forage in the Monterey Bay.

California Sea Lions Return to Monterey Bay. April and May are excellent times to observe male California sea lions in Monterey Bay. Sea lions can be found in fairly large numbers in the bay during April and May feeding on fish and squid, preparing for upcoming breeding season at the Channel Islands. A great place to observe large bull California sea lions is the Monterey Coast Guard jetty and the pilings under the wharf in Monterey Harbor. The large males have a very pronounced sagital crest (bony ridge) on the top of their heads which probably serves as a secondary sexual characteristic. Large males can attain a weight of 700 to 800 pounds; the smaller females which attain a weight of 200 pounds remain in the waters and rookeries of southern California coast and Baja California.

Orca Sightings. On eight different occasions so far this spring transient killer whales have been seen in Monterey Bay. On March 20th, 32 transient killer whales were seen by Nancy Black and Captain Danny Frank 10 miles west of Point Piños. All 32 were photographed and were identified by Black as transients who have visited the bay before. On March 25th, 18 transient killer whales, a part of the same group of 32 who were seen earlier in the month, were again photographed and identified by Black. Photo identification is an important field tool as it gives researchers like Nancy Black and Alisa Schulman the opportunity to compile data on the evolving knowledge of killer whale ecology and biology. Transient killer whales prey on other marine mammals including gray whales. Attacks of killer whales on gray whales in Monterey Bay are an annual occurrence with April and May being peak months to observe predation. National Geographic will be in Monterey until the end of may trying to film orca predation sequences. A gray whale was attacked on Saturday, April 14th, but by the time National Geographic get there, the attack had concluded.

Barracuda. On April 17, three Pacific barracuda (*Sphyraena argentea*) were caught on dead anchovies by fishermen while fishing for salmon off Marina Beach. One barracuda measured 36 inches which means it was approximately 7-8 years old. Although barracuda have been found as far north as Kodiak Island, they are found primarily south of Point Conception with the large pelagic schools being found in waters off southern California and Baja California. During the 1982-83 El Niño, Pacific barracuda were found in California waters as far north as Del Norte County with good numbers being found in the Monterey Bay during those years. Anybody wishing to observe Pacific Barracuda can do so as the Monterey Bay Aquarium Outer Bay Exhibit. Barracuda prey on anchovies, sardines and squid, all prey items abundant in the Monterey Bay.

White Shark Sighted Off Capitola Beach. Monterey Bay is part of an area Marine Biologists refer to as the "red triangle". The area located between the Monterey Bay, the Farallon Islands and Tomales Bay is considered to have one of the most sizable great white shark (*Carcharodon carcharias*) populations in the world. On April 11th beach goers saw a great white shark estimate to be 12 to 18 feet in length. It is not surprising considering the prodigious amount of pinnipeds in the Monterey Bay and the Gulf of the Farallons National Marine Sanctuaries. Great whites are present year round in Sanctuary waters and reach their greatest abundance in northern sanctuary waters in the months of October through January when elephant seal populations begin to increase. Big great white sharks (17 to 20 feet in length) aggregate around seal colonies like Año Nuevo and the Farallon Islands. Great white sharks are on the earths most beautiful and formidable predators and need to be protected not only for their own intrinsic value but because they are the last major predator of pinnipeds with whom humans compete with for marine resources.

Vanishing Wildlife Exhibit Opens May 19. The Monterey Bay Aquarium's new permanent exhibit "Vanishing Wildlife" will give visitors a new underwater perspective from which to view open ocean species in the million gallon display. The gallery will focus attention on the plight of several threatened and little known marine animals that most people could not otherwise experience. Pacific bluefin tuna, scalloped hammerhead sharks, dolphin fish (mahi mahi) and pilot fish are just a few of the marine animals that will be featured.

Tagging of Pacific Pelagics (TOPP). The first ever global census of marine life, satellite tags pioneered by the Tuna Research and Conservation Center will be used to tag about 4,000 different open ocean animals in the North Pacific. Data gathered from whales, sharks, tuna, sea turtles, pinnipeds and albatross will help show how currents, sea temperatures and upwelling of deep ocean water influence where animals feed, gather and migrate.

Squid! During spring and summer months market squid (*Loligo opalescens*) return to Monterey Bay to copulate and deposit the egg capsules on the sandy sea floor. In some years squid spawn in prodigious numbers and become an important food source for marine mammals, seabirds and fish. Some of the marine mammals found in Monterey Bay that prey on squid include Risso's and Pacific white-sided dolphin, California sea lions, harbor seals, blue sharks, bat rays and albatross to name just a few. Squid are an indispensable link in the local and global food web providing primary forage for at least 30 species of marine vertebrates. There currently is no regulation on squid fishing in California waters and in order to keep squid populations healthy, legislation has been proposed to regulate the fishery.

Oceanic Society Farallon Islands Nature Cruises. In spring and summer nearly a quarter of a million seabirds nest on stark granite cliffs that rise sharply from Pacific just 27 miles from San Francisco's Golden Gate. Nutrient rich upwelling from the nearby continental shelf attracts marine life of all kinds. Blue and humpback whales, Dall's porpoise, Pacific white-sided dolphin and Risso's dolphin are possible sightings. Trips begin on Saturday June 2nd and continue every weekend through November. The cost is $67 per person. For information and reservations call 415-474-3385.

Local Whale Watch Exploration. Feeding humpback whales, northbound gray whales, orcas, dolphin, pinnipeds and seabirds are all possible observations from just a few hours spent in Monterey Bay with your local whale watching companies:

Monterey Bay Whalewatch	**Monterey Sportfish & Whalewatch**
Runs three 3½ hours trips daily departing from Sam's Sportfishing near the end of Fisherman's Wharf #1. For information call (831) 375-4658.	Runs three 2 hour trips daily departing from Monterey Sportfishing near the end of Fisherman's Wharf #1. For information call (831) 372-2203.

FIELD NOTES
FROM CALIFORNIA WATERS

False Killer Whales. A group of False killer whales were seen off the coast of Southern California around the Newport/Laguna Beach area. One Pseudorca was seen eating a 20-25 pound king salmon. False killer whales are typically associated with warm temperature and tropical waters around the world. There are occasional records of vagrants in northern temperature waters. Sightings north of southern California are considered unusual. False killer whales prey on squid and large fish such as tuna, Pacific bonita and mahi mahi. False killer whales also occasional prey on dolphin. False killer whales measure 15-18 feet in length and weigh 1.1 and 1.4 metric tons, males being larger than females.

Season's First Blue & Fin Whales Spotted in Santa Barbara Channel. At least two sightings of Blue whales and two sightings of Fin whales have been reported in the waters of the Santa Barbara Channel. Fishermen around Santa Rosa Island have been reporting periodic Blue whale sighting since March 20th. Also, boats from Island Packers out of Ventura on whale watch and island day trips have spotted fin whales between Anacapa and Santa Cruz Islands. The first fin whales were spotted March 10.

Offshore Orcas Sighted in Southern California. A group of 25-40 offshore killer whales have been seen several times in southern California waters during the month of March. Then include sightings from around Catalina Islands to the mainland from the Newport/Laguna beach area to Palo Verdes and up to Santa Barbara. There was a report of offshores from an Island Packers trip to Santa Cruz Island in early March and since then there have been several sightings including a group that surrounded a fin whale approximately 60 feet in length off the Laguna/Dana Point area.

In the Monterey Bay on Sunday April 1, Alisa Schulman was participating in the Gray Whale census off the Palos Verdes Peninsula when she spotted approximately 30 offshore killer whales; she jumped on a boat and shot 7 rolls of film. The next day a group of 25-30 offshores were seen off Malibu, and then were off the coast of Santa Barbara just in time for the Condor's 12 noon whale watching trip. The Condor, captained by Matt Curto on that trip, saw 25-30 offshore killer whales. "They were all around us" said Matt, "passing within a few feet of the boat. "We saw breaching and lobtailing, lots of spectacular behavior". Later on in the day the orcas were seen further north up the coast off the new luxury resort hotel Bacara. Captain Fred Benko was able to catch up to the orcas later on in the day in a smaller boat. One of the pictures taken from that trip appeared in our local paper, The Herald.

Informational Links

ACS Monterey Bay Chapter website:
http://www.starrsites.com/acsmb
ACS National website:
http://www.acsonline.org
Monterey Bay Aquarium, Monterey
http://www.mbayaq.org/
Condor Cruises, San Barbara
http://www.condorcruises.com
Oceanic Society Expeditions, SF
http://www.oceanic-society.org
Island Packers, Ventura
http://www.islandpackers.com
Project Sea Wolf
http://home.earthlink.net/~projseawolf/
Sea Shepard Conservation Society
http://www.seashepherd.org
Tag a Tuna Website
www.tunaresearch.org
Audubon Living Oceans Program
www.audubon.org/campaign/lo

(If you know of a fun or interesting link to a website about anything related to

SEA SHEPHERD MOVES TO STRENGTHEN EXISTING INTERNATIONAL BOYCOTT

As part of our overall strategy to end the whale slaughter in the Faroe Islands, we are moving to strengthen our highly successful boycott of the Faroe's major income source -- seafood.

Below, we list the major steps that organizations and individuals can take to ensure that the pressure remains intense.

1. DON'T BUY UNILEVER Brand-named products

To date, a number of major European food corporations -- Tengelmann, Aldi, Edeka, Karstadts, and Rewe - have agreed to terminate their seafood contracts with the Faroe Islands. This represents a loss of over 20,000 shops, markets, restaurants, and other retail outlets for the Faroes' main export. This is the most successful boycott of the Faroes whale hunt ever mounted. The fishing industry is in distress, but has not yet bowed to the will of the people due to the one major holdout among European importers: **UNILEVER**

The company says it will purchase fish on a case-by-case basis, from boats whose captains promise they are not involved in the Grind hunts. This premise is absurd, unworkable, and unenforceable.

Do not buy any products from the following Unilever brand-names and subsidiaries, and let them know you are not, and will not buy their products until the company terminates its Faroes seafood contracts:

Langnese
Good Humor-Breyer's*(Ice creams)*
Igloo *(Ice cream bars)*
I Can't Believe It's not Butter
Lipton's Tea
Gorton's*(Packaged fish products)*
Chicken Tonight
Ragu *(Spaghetti sauces)*
Bird's Eye *(Frozen and canned vegetables)*
Pierrot Lusso
Wish-Bone *(Salad dressings)*
Ben & Jerry's*(Ice Cream)***SEE SPECIAL SECTION**
Dove *(Soaps)*
Vaseline*(Petroleum jelly)*
Mentadent *(Toothpaste)*
Salon Selectives *(Shampoos)* **Please buy PAUL MITCHELL**products!!
Bertolli *(Olive oils)*
Amora
SlimFast *(Diet foods)*

For complete contact information on all Unilever subsidiaries, go to:
www.mind-advertising.com/nl/unilever_nl.htm

2. Write a letter in your own words based on the following example:

Prime Minister Poul Nyrup Rasmussen
Statsministeriet
Christinsborg
Prins Jorgens Gaard 11
Copenhagen 1218
Denmark

Dear Prime Minister Rasmussen,

The slaughter of over 1,000 long-finned pilot whales and other small cetaceans every

year in your protectorate of the Faroe Islands is abhorrent to all civilized persons. Denmark's annual subsidy to the Faroes in the amount of 1 million Crowns makes your government directly complicit in these unnecessary and unjustifiable actions. I urge you to instruct your High Commissioner in the Faroe Islands that there will be no further financial subsidy forthcoming from the Kingdom of Denmark until the Faroes Home Rule government has banned the pilot whale "Grind hunts."

Pending notification of this action on your part, neither I nor any of my associates will purchase any product of Denmark, and we will prevail upon our companies to suspend all trade relations with firms based in your country.

Respectfully yours...

3. Please give your patronage to the companies that have joined with us on this boycott... and let them know you appreciate their support!

4. Thank the following firms for terminating their contracts with Faroe Islands seafood suppliers until the practice of hunting pilot whales has been halted:

EDEKA ZENTRALE AGPresse - und ?fentlichkeitsarbeitJoachim Brozio
New-York-Ring 622297 Hamburg Germany
Telefon: 040/6377-2575
Telefax 040/6377-4575
E-Mail: joachim.brozio@edeka.de

REWE-Weiss OHG
Salvador-Allende-Platz 25
07747 Jena-Lobeda Germany
Tel.: (03641) 338515/-16
Fax: (03641) 336517
eMail: kontakt@rewe-jena.de

Aldi GmbH & Co. KG
Am Seegraben 16
63505 Langenselgbold
Germany
http://www.aldifoods.com

KARSTADT
Warenhaus AGHauptverwaltungTheodor-Althoff-Str.
245133
EssenTelefon: (0201) 727-1
Fax: (0201) 727-5216
http://www.karstadt.de/engl/info/

UPCOMING EVENTS, TRIPS & SEMINARS

Now until April 30

Elephant Seals at Año Nuevo State Reserve

20 miles north of Santa Cruz on State Highway One. Observe elephant seal breeding season. For fee info & reservations far in advance, call 800-444-7275 or show up and hope for a cancellation. Guided walk only.

Elephant Seals at Piedras Blancas

Just south of Piedras Blancas Lighthouse on State Highway One. Exercise caution when parking. Be careful and respectful of animals. Guided walk only.

Now through mid-May **Point Sur Lighthouse Guided Tours.** Saturday 10am & 2pm. Sunday 10am. Watch northbound migrating gray whales from the spectacular Big Sur coastline from the Point Sur Lighthouse. Volunteer led three-hour walks on paved roads less than a one-mile distance with steep rise in elevation of 360 feet and two staircases of 40 and 50 steps each. For information call 625-4419.

April 28, September 9, November 3

24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe Sperm, Blue, Fin, Gray and Beaked whales, and possibly Pilot whales and offshore dolphin species, as well as, spring pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or E-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

Saturday, May 19

2001 ACS National Humpback & Northbound Gray Whale Migration Trip - Santa Barbara Channel

8am to 5pm, departing from Santa Barbara Harbor aboard the 88-foot Condor. This all day excursion will explore the waters of the Channel Islands National Marine Sanctuary and the waters surrounding the Channel Islands National Marine Park. The first leg of the trip will explore the beautiful north Santa Barbara coastline heading toward Point Conception, including possible sightings of northbound gray whale mothers and calves, bottlenose dolphin, common dolphin, and sea otters. When parallel to Santa Rosa Island passage will be made into the channel and sanctuary and additional observation may include early season sightings of feeding blue whales, fin whales, minke whales, orcas, and friendly and acrobatic behavior of humpback whales, as well as, various seabird, dolphin and porpoise species. In recent years as many a three species of whales have been observed feeding on krill in the later spring months, which included blue, humpback and gray whales. During the trip the rich natural and cultural history of the area will be expertly narrated. Prices: ACS Member $70, Non-member $75; if you sign up before April 23, get a $5 earlybird discount. For an additional $5 you may reserve a bunk; only 49 are available, so sign up early for a bunk. For more information contact Diane Hustad, ACS National at 310-548-6279.

Wednesday, May 2

"Save Our Seas" Public Forum Seminar Series

7pm-9pm, Monterey Bay Aquarium lecture hall. The third and final public forum seminar series "Save Our Seas: New Approaches for a New Millennium", will include the following speakers: Dr. Rosamond Naylor- "Farming Up the Food Web", Dr. Callum Robers- "New Approaches for Marine Reserves", and Dr. Daniel Pauly - "Our Future in Our Hands". For more information call the Monterey Bay National Marine Sanctuary at 831-647-4201 or visit www.mbnms.noaa.gov.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State_____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**

Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

Saturday, May 5 & Sunday, May 6

Sea Chanteys and River Songs, Saturday, May 5, 8pm & Sunday, May 6, 3pm at the Golden Bough Theater, Monte Verde & 8th in Carmel. The Monterey Peninsula Choral Society along with the Children's Chorus will perform sea chanteys and river songs, including songs about whaling, and life at sea and along the shore. Lively performances and a varied selection of music will delight all. Come experience music inspired by water and whales. $18/reserved; $12/general admission; $6/children under 12. Tickets are available at the Thunderbird Bookstore, Kingdom Come Books, Bookmark and Bay Books, or by calling 831-625-3237.

Sunday, May 6

Baja Expeditions Whale Watching: Sea of Cortez Whales Travel among the Midriff Islands in the Sea of Cortez trying to observe Fin, Humpback, Sperm, Orca and Pilot whales. Snorkle in waters with beautiful tropical fish. Watch nesting blue footed boobies, Royal and Elegant Terns. $1,995- 2,195. For more information call 800-843-6967.

Monday, May 7 & Wednesday, May 23

UCSC Ocean Science Seminar Series, Earth & Marine Science Building, Room A-340, UCSC
Monday, May 7, 3:30pm: "ENSO Past, Present and Future" Mark Cane, Lamont Doherty Earth Observatory, Columbia University.
Wednesday, May 23, 3:30pm: "Requiem for Picker: Krill and Squid in the California Current" Mark Mangel, Environmental Studies Department, UCSC.

May 20

Farallon Islands Marine Biology Cruise, California Academy of Sciences. 7:15am-3:30pm, $70. The Gulf of the Farallons National Marine Sanctuary is a remarkably rich marine environment home to a wide array of migrating fish, birds and marine mammals. Cruise aboard a sixty-five foot fishing boat to the abundant wildlife characterizing this marine sanctuary.

May 21-24

52nd Tuna Conference, University of California, Lake Arrowhead Conference Center
For more information visit: www.swfcsc.ucsd.edu/tunaconf.htmlsmm

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American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

Soundings

American Cetacean Society ~ Monterey Bay Chapter **May 2001**
The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

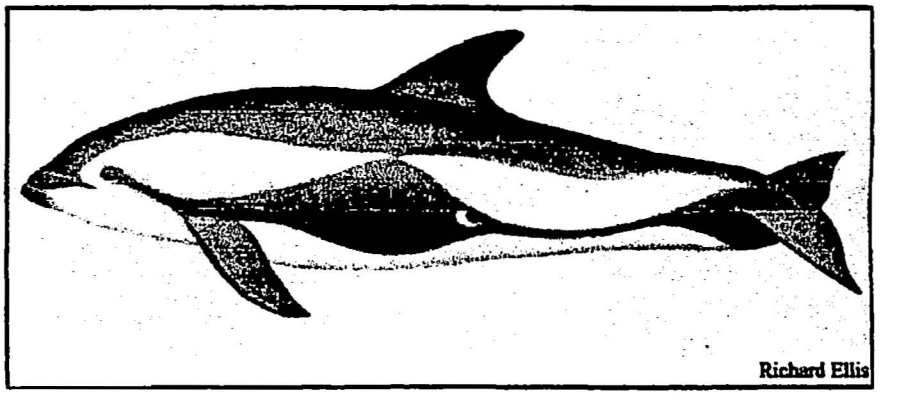
Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building
(Across from the American Tin Cannery Outlet Stores)

Date: **Thursday, May 31st 2001**

Time: **7:30 p.m.**

Speaker: **Debra Love Shearwater, Shearwater Journeys**

Title: **Antarctica, The Falklands & South Georgia Island: An Ocean Lover's Paradise**



In this remote and ageless environment where ice covers more than 90% of the land mass is the last of the continents that man has attempted to conquer. A journey to Antarctica was once accessible to only a handful of explorers and scientists, but today it is within easy reach of the of the adventurous traveler. It is a land of noisy elephant seals, belligerent Antarctic fur seals, curious penguins, and awesome albatrosses. It is a journey of ocean crossings- Drake Passage and the Scotia Sea, and-cruising the South Atlantic. Oceans alive with swarming krill and marine mammals-feeding Humpbacks, Minkes, Fins, Orcas hunting at the pack ice edge and Hourglass Dolphins riding the bow. Pristine air makes icebergs, bergy bits, sunsets and landscapes sharper and more dramatic. This particular journey included visits to the Antarctic Peninsula, The Falklands, and South Georgia. The historical aspects of this area are intriguing. A total of 175,250 whales were processed through the whaling stations of South Georgia since the first whale was brought to Grytviken on December 24, 1904. Today, the old whaling vessel, "Petrel," lies embedded in the beach, her harpoon pointing toward land.

Our speaker was one of the naturalist/lecturers on board this January 2001 expedition. Through her company, Shearwater Journeys, she has guided over 50,000 people on ocean trips off the central California coast. She began her journeys in Monterey Bay in 1976. Please join us for an exhilarating journey to a fascinating part of our planet.

Thank you!
Photographs included in this issue were scanned courtesy of Jack Starr.

From the Editor...Tony Lorenz

ACSMB is pleased to announce that Jason Gedamke has been awarded the Alan Baldrige Award grant in the amount of $500 for his proposal entitled **"Minke whale breeding ground behavior and use of the Great Barrier Reef habitat."**

Abstract: Over millions of years in an environment where light attenuates quickly, marine mammals have evolved intricate acoustic systems of communication utilizing the efficient sound propagating properties of the ocean. While all baleen whales are known to produce sounds, the function of most of these sounds are unknown because large whales are typically difficult to study. Only humpback whale song has been extensively studied. It is most likely used as a reproductive advertisement display for competing with males or attracting females, similar to the songs of birds, or a peacock's ornate tail. An entirely unique site occurring on the Great Barrier Reef of Australia has permitted an unprecedented study of the sounds of the minke whale (*Balaenoptera acutorostrata*) and led to the discovery of a repetitive sound sequence, or song, that has not previously been reported. Through a combination of vessel based techniques and remote acoustic buoys we have been studying the functional significance of this sound, and with this proposal, we hope to determine whether it is used in a reproductive role similar to humpback whale song.

Congratulations Jason Gedamke!

Originally appeared on the MBNMS website 5/6/01
http://www.mbnms.nos.noaa.gov/Resourcepro/reports/LFAreport/index.html
Reprinted with permission. Please see website for color detailed maps.

MBNMS LFA Report: Deep Diving Whales
Assessment of Deep Diving Whales Major Distribution Within the MBNMS

Introduction

Currently the U.S. Navy is consulting with the Director of the Office of National Marine Sanctuaries in order to deploy Surveillance Towed Array Sensor System Low Frequency Active Sonar (SURTASS LFA) within the Monterey Bay National Marine Sanctuary. The sonar system is a long-range, low frequency sonar that has both active and passive components. The purpose of the proposed action is to meet U.S. need for improved capability to detect foreign submarines at long range. The characteristics and operating features of the active component (LFA) are:

- The source is a vertical line array of up to 18 source emitters suspended below the vessel.
- LFA's transmitted beam is omnidirectional (360 degrees along a horizontal plane (nominal depth of the center of the array is 122m [400 ft]), with a narrow vertical beamwidth that can be steered above or below the horizontal axis.
- The source frequency is between 100 and 500 Hz. A variety of signal types can be used including continuous wave (CW) and frequency-modulated signals.

It is possible that this deployment of acoustics will adversely affect Sanctuary resources. Operation of the SURTASS LFA system may constitute a violation of federal regulations at 15 CFR (922.132 (5)) which prohibit taking any marine mammal, sea turtle or seabird in or above the Sanctuary, except as permitted by regulations, under the Marine Mammal Protection Act, the Endangered Species Act, and the Migratory Bird Treaty Act. NOAA Fisheries (NMFS) will determine whether to grant the Department of Defense a small take exemption under the Marine Mammal Protection Act.

The FEIS for SURTASS LFA Appendix A states: "Sanctuary regulations require that military activities be carried out in a manner that avoids to the maximum extent practicable adverse impacts on Sanctuary resources and qualities. The Navy has determined that Alternative 1 of the Draft OEIS/EIS would meet this requirement".

Sanctuary regulations at 15 CFR 922.132© except some Department of Defense activities from the above prohibitions, but only military activities specifically identified in the MBNMS Final Environmental Impact Statement/ Management Plan (FEIS/MP) published in June 1992. Sanctuary regulations are very clear in stating that the prohibitions in paragraphs (a) (2) through (9) do not apply to existing military activities carried out by the Department of Defense. SURTASS LFA was not identified as a pre-existing activity in the 1992 FEIS/MP, and would therefore not be eligible for exception from these prohibitions. However, new activities may be exempted after consultation between the Director and the Department of Defense.

We understand the intent of the Navy's proposal is to keep the sound source outside the limits of the United States Territorial Sea. This should reduce potential impacts to the migrating Gray whales during the winter and spring. However, the Monterey Bay National Marine Sanctuary has concerns regarding the variety and distributions of deep diving whales throughout our boundaries, in particular, offshore areas beyond the Territorial Sea during spring, summer, and fall.

Deep Diving Whales Range Distribution Charts.

The Sanctuary has compiled charts of the range and distribution of some of the deep-diving whale species present within our region. All of these species are either threatened or endangered, and all are sought by a growing number of whale watching boats in central California. These data are summarized below.

Chart 1 – Deep Diving Whales Major Range Distribution. The Blue Whale major adult area is illustrated by green diagonals and is within Sanctuary boundaries from May through December. The Right Whale adult area is depicted by the light orange dots

and ranges throughout Sanctuary boundaries from October through March. The Humpback Whale major adult area is illustrated by purple diagonals and is within Sanctuary boundaries from May through October. The Fin Whale major adult area is depicted by blue dots and is within Sanctuary boundaries from April through September. The Sperm Whale major adult area is illustrated by orange verticals and is over Davidson Seamount on a year-round basis.

Chart 2 – Blue Whale Range Distribution. Blue Whales are the largest animal to live on earth and in the past decade its numbers have surged locally. The Monterey Bay National Marine Sanctuary hosts several hundred blue whales annually who come to the region to feed on krill. These animals are highly mobile and it is thought that they move regularly between the Monterey Bay region and other feeding grounds near Cordell Bank and the Channel Islands. Blue Whales within the MBNMS range throughout the Sanctuary boundaries from May to December as depicted by the blue dots. The area in green illustrates the major adult area from May to September.

Chart 3 – Northern Pacific Right Whale Range Distribution. Marine Scientists consider the Northern Pacific Right Whale the most rare mammal in the world. It represents a separate subspecies from the Atlantic Right Whale, which we understand the Navy has elected to avoid on the eastern U.S. seaboard. The three most recent sightings of the Northern Pacific Right Whale south of Alaska have occurred in the Monterey Bay National Marine Sanctuary, two of which occurred in the last four years. The entire region is considered to be within the Right Whales' range. Any disturbance to this extremely rare whale could be disastrous. Right Whales within the MBNMS range throughout the Sanctuary boundaries from October through March as depicted by the orange dots.

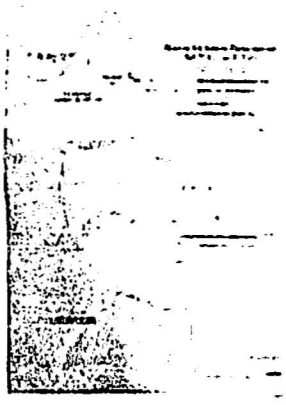


Chart 4 – Humpback Whale Range Distribution. Humpback whales are highly acoustic animals known for their "songs". Their songs are long and complex intertwining melodies, which can sometimes last up to twenty minutes long. These songs are repeated continuously for hours. The Humpbacks in the North American Pacific populations all sing the same song which progressively changes over the years. The bulk of evidence thus far, points to the singing whales being males; it is thought that these songs are a function of mating behavior. Any device that has the potential to effect, impede, or alter this behavior should be examined critically. Humpback whales within the MBNMS range throughout the Sanctuary boundaries from May through October. The area depicted in red diagonals is the major adult concentration for feeding and migration from May through October, as well as the recreational viewing area from June through September. The area in blue dots depicts the major adult area for feeding and migration from May through October.

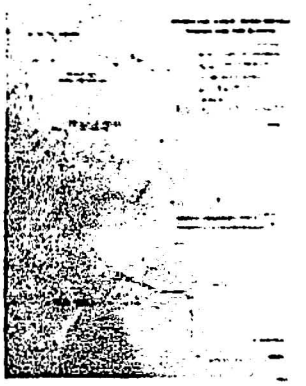
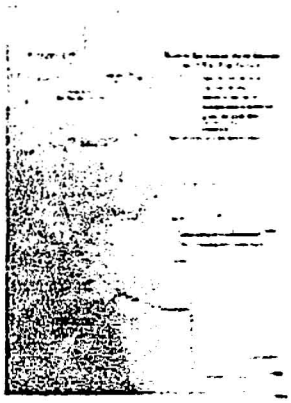


Chart 5 – Fin Whale Range Distribution. Once one of the most abundant of the large whales, the Fin whale was heavily exploited by the whaling industry and its population has been severely depleted. Current figures suggest that a mere 80,000 animals remain worldwide with between fifty and several hundred in the MBNMS. Fin whales within the MBNMS range throughout the Sanctuary boundaries from April through September and commonly feed on krill associated with upwelling at the boundaries of offshore currents. The area depicted by small blue dots illustrates the major adult area whereas the area depicted by the larger blue dots illustrates the general adult area.

Chart 6 – Sperm Whale Range Distribution. The Sperm whale is the deepest diving whale and can swim to depths of 1000 m, and stay submerged for over an hour. At depth there is very little light available and hence these whales have developed a superior echolocation ability, which they use to find their prey. As such, these animals are highly dependent upon sound. It is unlikely that an observer on a ship would be able to accurately interpret this animal's reaction to LFA, or to even see a Sperm whale feeding in the Sanctuary. Sperm whales within the MBNMS range throughout the Sanctuary boundaries on a year round basis. The adult area within Sanctuary boundaries is illustrated by blue dots. The major adult area that should be noted, though it is outside of Sanctuary boundaries, is the area around Davidson Seamount as depicted by the orange lines.



Beaked Whales

The Monterey Bay National Marine Sanctuary has three species of beaked whales that inhabit our waters- the Baird's, Cuvier's and Hubbs beaked whale. Little is known about these cetaceans. They may be rare or merely elusive, but generally they live in deep offshore waters and have escaped live studies. Studies of dead beaked whales from the March 2000 Bahamas strandings by Kenneth Balcomb, indicate that a resonance phenomena in the whales cranial airspaces may be responsible for tearing apart the delicate tissue around the ears and brain. Kenneth Balcomb further reiterated that the resonance frequency of airspaces in Cuvier's beaked whales to be about 290 Hz at 500 meters depth, which is precisely the middle frequency of LFA as described in the OEIS/EIS.

Marine Mammal Abundance Information

Table 1 was generated from data compiled by the National Marine Fisheries Service and reports the estimated Pacific populations well as the estimated California populations for the species of whales: Blue, Humpback, Fin, Minke, Gray, Northern Right, Sperm, Cuvier's Beaked, Baird's Beaked, and Mesoplodont Beaked. Migrating species are indicated seasonally on the right of the table.

From: Forney et al. 2000, U.S. Pacific Marine Mammal Stock Assessments: 2000.

NOAA Technical Memorandum NMFS/SWFSC 300

Species	Estimated Pacific Population	CV	CA Estimated Population*	CV*	Winter	Spring	Summer	Fall
Blue Whale	1940	0.15	not calculated		Migrating S	Migrating N	Present	Present
Humpback Whale	905	0.06	319	0.41	Migrating S	Migrating N	Present	Present
Fin Whale	1236	0.2	49	1.0	Lower #'s	Lower #'s	Present	Present
Minke Whale	631	0.45	73	0.62	Present	Present	Present	Present
Gray Whale	26635	0.1006	not calculated		Migrating S	Migrating N	Absent	Absent
Northern Right Whale	Unknown		not calculated		Possible	Unknown	Unknown	Unknown
Sperm Whale	1191	0.22	892	0.99	Present	Peak	Peak	Present
Cuvier's Beaked Whale	5870	0.38	not calculated		Possible	Possible	Possible	Possible
Baird's Beaked Whale	379	0.23	not calculated		Lower #'s	Lower #'s	Possible	Possible
Mesoplodont Beaked Whales	4098	0.5	not calculated		Possible	Possible	Possible	Possible

*Forney et al. 1995. (Not corrected for diving whales)/ CV= Coefficient of Variation

Table 2 is taken from the Final EIS/EIR for the California ATOC project and estimates the marine mammal stock of the following species of whale: Blue Humpback, Fin, Minke, Gray, Sei, Northern Right, Sperm and Beaked for the offshore central California area. This table separates Winter/Spring populations from Summer/Fall populations.

From: Final EIS/EIR for the California Acoustic Thermometry of Ocean Climate Project, April 1995. Estimates of the stock of marine mammal species offshore central California

Species	Winter/Spring Population	CV	Summer/Fall Population	CV
Blue Whale	28	1.03	2198	0.36
Humpback Whale	375	0.36	609	0.41
Fin Whale	78	0.8	913	0.59
Minke Whale	71	0.61	569	1.1
Gray Whale	20869	0.34	not calculated	
Sei Whale	not calculated		61	1.21
Northern Right Whale	16	1.08	not calculated	
Sperm Whale	857(1286)*	1.05	725(1088)*	0.47
Beaked Whales (Cuvier's, Baird's, Mesoplodont)	426(852)*	0.38	1430(2860)*	0.91

* Numbers in ( ) indicate estimates accounting for whales submerged during entire survey evolution

CV= Coefficient of Variation

Sea Turtle Abundance Information

Table 3 is taken from the Final EIS/EIR for the California ATOC project and estimates the following sea turtle species: Leatherback, Green, Olive and Loggerhead. The abundance of these species is unknown.

From: Final EIS/EIR for the California Acoustic Thermometry of Ocean Climate Project, April 1995

Estimates of the stock of sea turtle species offshore central California.

Species	Abundance	Remarks
Leatherback Sea Turtle	Unknown	Note 13
Green Sea Turtle	Unknown	Note 11,12
Olive Ridley Sea Turtle	Unknown	Note 11
Loggerhead Sea Turtle	Unknown	Note 11

Note 11: NOAA-TM-NMFS-F/SPO-2, Dec 1992 (for eastern tropical Pacific [ETP])

Note 12: "Green turtles are the most commonly observed hard-shelled sea on the western coast of the USA." (NOAA-TM-NMFS-SWFSC-186, Sep 193)

Note 13: Predominant sea turtle in central California

coastal area (Eckert, pers. Comm., 1994)

Acoustic impacts

The University of California at Santa Cruz, Marine Mammal and Seabird Ecology Group has produced a technical report for LFA EIS entitled Marine Vertebrates and Low Frequency Sound that states: Richardson et al. (1991) found that belugas have an auditory threshold of 40 dB. This suggests, by analogy, that belugas experience discomfort at sounds of 140-160 dB (Gordon and Moscrop 1996). If cetaceans such as baleen whales have similarly low auditory thresholds for LFS, then sound levels of 195-210 dB could result in immediate damage and permanent threshold shift (PTS).

Because all species of mysticete whale recorded to date produce loud, species-specific signals in the low-frequency band, they are particularly at risk from manmade LFS. It is unclear whether low-frequency signals produced by most mysticetes are used for communication, orientation, navigation, or detection of predators and prey. However, disruption of any of these functions could interfere with normal activities and behavior, and potentially impact the reproductive success of individuals and eventually the size of a population.

Furthermore, Whale Biologist Kenneth C. Balcomb, has stated in a letter sent to Mr. J.S. Johnson, SURTASS LFA Sonar OEIS/EIS Program Manager, dated February 23, 2001 that:

Based on two significant mass mortality events (Greece and the Bahamas) the body of evidence indicates that not only is resonance with LFA and sonar frequencies a problem for beaked whales, the sound pressure level of 180 db RL is demonstrably not safe for beaked whales and is probably not safe for other cetaceans.

NEPA issues

The following is a list of public hearings held by the Department of Defense regarding LFA: Norfolk, Virginia 1999, San Diego, California 1999, and Honolulu, Hawaii 1999. The National Environmental Policy Act requires agencies to provide public notice to people and agencies who may be interested or affected (40 CFR 1506.6[b]) and to those who have requested it (40 CFR 1506.09(b)(1). The residents of the communities adjacent to the Sanctuary boundaries were not adequately informed of this proposed project.

Furthermore, it is the position of the MBNMS that the latest research mentioned above presents a seriously different picture of the likely environmental consequences of the proposed action not adequately envisioned by the original EIS, such that the Navy's failure to act on it may be arbitrary or capricious. A Supplemental Environmental Impact Statement (SEIS) would assist in adequately addressing potential ill effects of SURTASS LFA to species in the marine environment offshore central California.

The Sanctuary recognizes that thus far the Department of Defense has spent in excess of $350 million dollars developing the technology for this project. We applaud their dedication to ensuring, as stated in the FOEIS/EIS, "monies expended on the SURTASS LFA sonar program do not bind the Navy to deploy the SURTASS LFA sonar as proposed".

Observers

The Department of the Navy proposes in the Final Environmental Impact statement (p.2-14) to use visual monitoring for marine mammals and sea turtles from the SURTASS LFA sonar vessel during daylight hours. Generally, cetaceans spend over 90% of their lives below the water surface. This being stated, it is easy to comprehend why ship-based observers may be unsuccessful in identifying potentially impacted animals.

Research Activities

The Monterey area is recognized nationally and internationally for the extensive myriad research activities and organizations that are active in the region. Annually $160 million is spent on marine research at twenty-six facilities within the region. This research is conducted on a year-round basis throughout Sanctuary waters, but typically more effort is expended during the summer months. Hundreds, if not thousands, of research projects are conducted in Sanctuary waters each year. Obviously, underwater sound would have undesirable ramifications on these on-going studies and projects.

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Originally appeared on the MBNMS website 5/6/01.

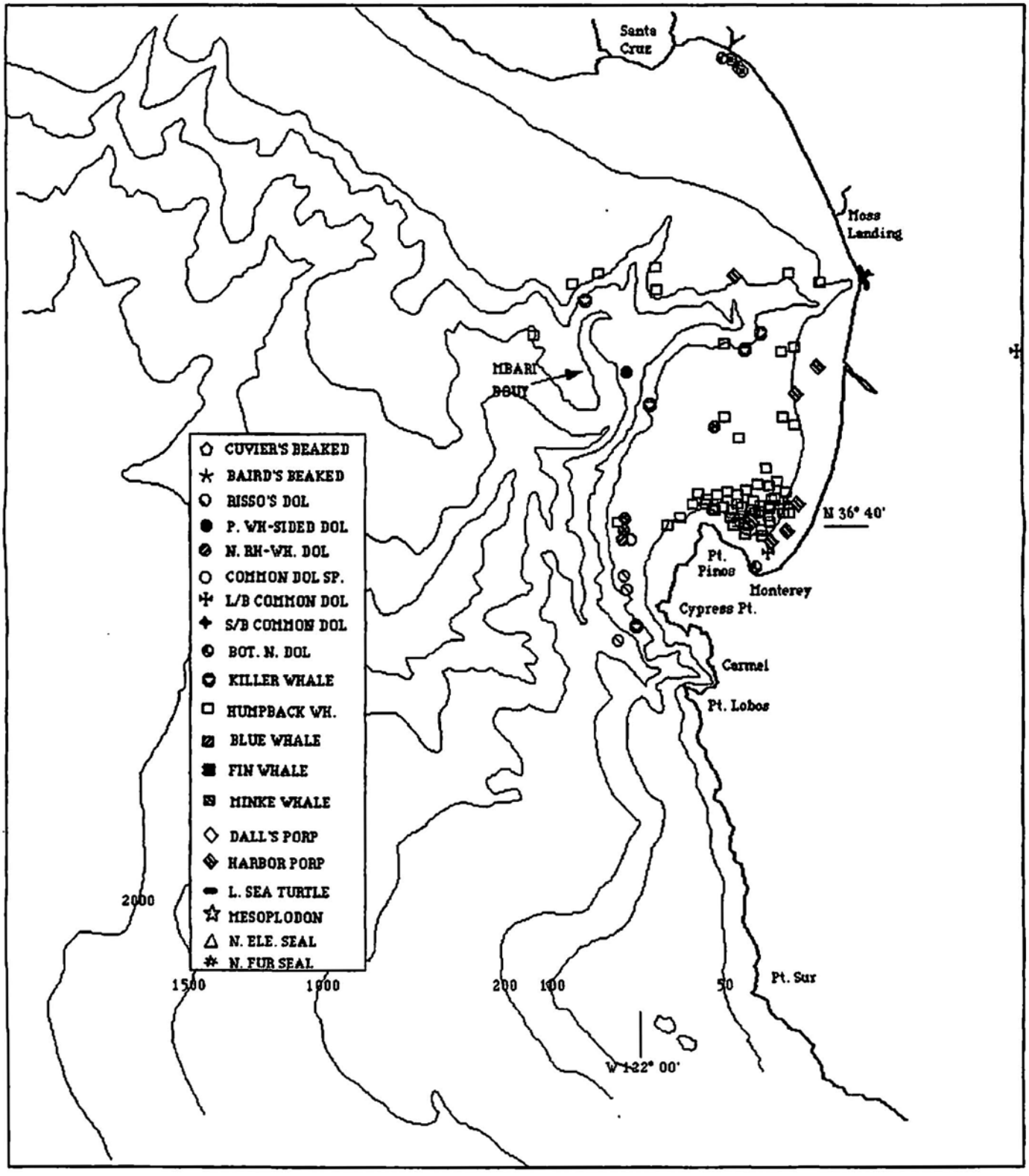
http://www.mbnms.nos.noaa.gov/

Please see website for color detailed maps.

Sightings

3/31/01-4/30/01

by Richard Ternullo



ACS Sightings

3/31/01 - 4/30/01

compiled by Richard Ternullo

Date	# of animals	Location	Obs
		HUMPBACK WHALE	

There are ninety-eight sightings of up to 30 individuals throughout the Bay and surrounding waters.

GRAY WHALE

Still present with a sharp decline in sightings after 4/18. Mother/calf pairs will probably extend into early June near to the coast and closely associated with kelp beds.

		KILLER WHALE	
4/12	25	1.5 mi WSW Cypress Pt.	
4/14	12	6 mi SW Moss Landing	
4/24	9	9 mi W Moss Landing	
4/27	6	3 mi W Moss Landing	
4/29	14	7.5 mi NW Pt. Pinos	
4/30	6	6 mi W Moss Landing	

		RISSO'S DOLPHIN	
4/1	15	3.5 mi W Pt. Joe	
4/16	50	2 mi NW Cypress Pt.	
4/16	5	4 mi SW Cypress Pt.	

		BOTTLENOSE DOLPHIN	
3/31	2	off Seacliff Bch. Vistor Center	
4/6	6	Seacliff VC	P. Karz
4/8	3	Near Monterey breakwater	
4/23	6	Seacliff VC	D. Dean
4/27	6	Cement ship	P. Karz

PACIFIC WHITE-SIDED DOLPHIN

4/8	150	4 mi NW Pt. Pinos
Associated with 100 **RISSO'S DOLPHIN** and 10 **NORTHERN RIGHT WHALE DOLPHIN.**		
4/27	100	4 mi NW Pt. Pinos
4/28	300	7 mi SW Moss Landing
4/30	150	8 mi S Santa Cruz

LONG-BEAKED COMMON DOLPHIN

4/4	700	2 mi NW Monterey Harbor
4/6	800	5 mi N Monterey Harbor
4/17	300	2.5 mi W Salinas River
4/19	400	3 mi W Salinas River
4/20	600	3 mi NW Monterey breakwater

HARBOR PORPOISE

4/9	3	1.5 mi W Marina Bch.
4/18	2	3.5 mi W Marina Bch.
4/19	10	2.5 mi W Salinas River
4/26	10	3 mi NW Moss Landing
4/27	9	1.5 mi W Salinas River
4/28	2	3 mi N Monterey Harbor

Contibutors: Monterey Bay Whalewatch, S. Van Sommeran, L. Oliver, D. Lemon, N. Lemon, H. Neece, D. Davi, National Geographic, C. Walker, and others.

Around the Bay

ACS Monterey Bay Chapter Welcomes Debra Shearwater. For 25 years Debra Shearwater has been leading pelagic sea birding trips into California's highly productive marine wilderness areas. She has led innumerable trips to prolific sea birding grounds such as the Albacore Grounds, Monterey Sea Valley, Pioneer Seamount, Bodega Canyon, Cordell Bank and most recently to Noyo Canyon and Viscaino Ridge off the Mendocino coast which produced an astonishing 480 black footed albatross.

Debra's trips, because of the highly productive locations she visits, often encounter cetaceans. Sightings on past trips have included sperm and beaked whales, blue whales, fin whales, humpback whales orcas, and several different dolphin species. Seabirds and cetaceans converge and forage in the same habitats, so cetacean sightings are quite common. During the summer and fall of 1997, blue whales were seen on almost every offshore trip.

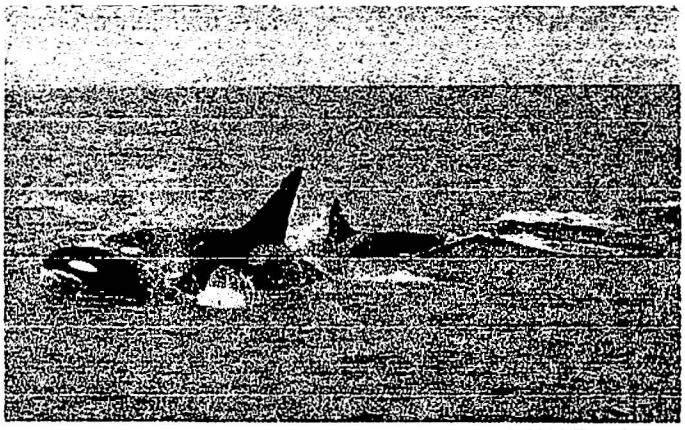
Debra Shearwater has been a pioneer in helping us better understand seabird ecology and biology. She has helped educate thousands of people over the years and has a vast tome of knowledge. Appreciation for seabirds has led to a greater understanding of this marvelous group of animals.

Orca Sightings Continue in Monterey. Late April through mid-May has continued to produce transient killer whale sightings in the MBNMS. The sightings include 2 adult male orcas ramming an immature northbound gray whale. The transients did not pursue predation probably because the older gray whale lacked the fat content that the younger calves possess. The transients are looking to predate on gray whale calves which are migrating north from Baja with their mothers through the months of April and May, until about mid-June. A group of transients was observed eating a male California sea lion on wednesday, May 2nd by National Geographic. National Geographic has been in Monterey since early April and will remain until the end of May hoping to film predation sequences of transient killer whales on gray whale calves.

Transient killer whales that are found in the MBNMS are a subspecies of killer whale that occupy the West coast waters of North America with at least three other distinct and independent forms of killer whales: residents, offshores and the L.A. Pod. The known range of transients includes the coastal areas of Southern California to the Aleutians Islands in Alaska. About 400 transient killer whales have been identified to date. Transients are genetically very distinct from resident and offshore killer whales, probably representing thousands of years of reproductive isolation. Within the transient forms of killer whales there appear to be three genetically distinct populations, and these correspond to patterns of geographic distribution, social association and acoustic variation.

The single most important factor defining the lifestyle of transient killer whales is their diet. Transients are marine mammal hunters, and their behavior, social structure, under sea acoustics and other aspects of their lives are highly adapted to exploit marine mammal prey.

Important prey species for transient killer whales



include gray whale calves, Dall's porpoise, harbor porpoise, Pacific white sided dolphin, harbor seals and elephant seals. Recently a transient was seen attacking and eating a common dolphin in Monterey waters, the first time this behavior has ever been recorded in Monterey. Transients have even been seen attacking the mighty blue whale.

Although sightings of transients are unpredictable and can occur within MBNMS waters at any time of year, the best time to observe them is in the winter and spring months and again in early September.

Local Whale Watching

Monterey Bay Whalewatch	Monterey Sport Fishing & Cruise
One 4-6 hour trip daily. 9AM - 2:30PM Call 831-375-4658 for information and reservations.	Two 3 hours trips daily. 10AM-1PM & 1PM-4PM. Call 831-372-2203 for information and reservations.

Spring, summer and fall are the best times of the year to whale watching the Monterey Bay and MBNMS. Our major source of upwelling comes from Año Nuevo-Davenport area and is advected downstream and aggregates along the canyon edges within the MBNMS, e.g., just off Point Piños or Cypress Point. Tremendous productivity occurs at several locations very close to the Monterey Harbor. Up to 27 different types of cetaceans utilize the rich prey resources within MBNMS. Some trips may produce blue, humpback, fin, minke and killer whales all on one trip – some of te best whale watching anywhere in the world. Leatherback sea turtles, Mola Mola (sunfish), blue sharks and albatross are also possible observations from whale watching trips. Other trips may produce up to six different species of dolphin, beaked whales, two species of porpoise or the very serendipitous sighting of a sperm whale.

Endangered Leatherback Sea Turtle Inadvertently Hit by Boat. An endangered Leatherback sea turtle was seen swimming injured and bleeding on Wednesday May 2 near Hopkins Marine Station. MLML was notified but by the time help arrived the turtle could not be located partially because of wind and choppy conditions. The leatherback is the worlds most endangered sea turtle with populations since 1980 dropping by more than 90%. Accidental mortality of leatherbacks by high seas commercial fishing fleets has been a major contributor to that decline.

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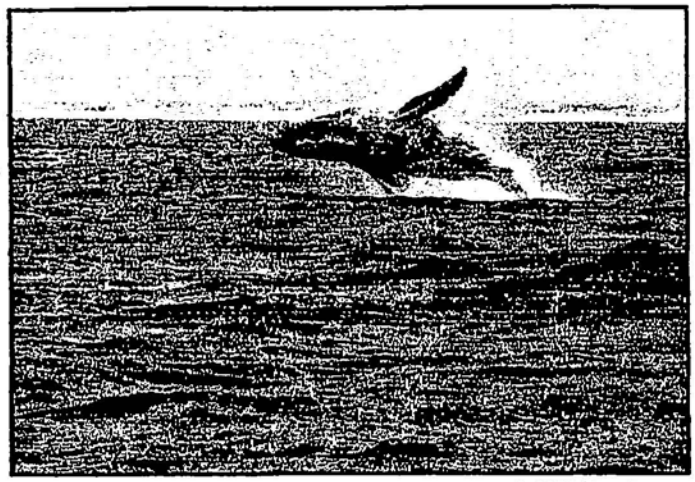
Leatherback sea turtles are found in all the world's oceans and have been observed from the Arctic Circle to the Antarctic convergence zones. Leatherbacks are one of the deepest diving of animals, diving to depths in excess of 1,300 meters.

Leatherbacks come into Monterey bay during the summer and fall months to forage on jellies and are sometimes seen during whalewatch expeditions. Genetic analysis has determined that leatherbacks that come to Monterey Bay originate from Western Pacific nesting beaches, possibly in Indonesia. The estimated worldwide population of leatherbacks is thought to be between 29,000 - 40,000. Since leatherbacks forage on gelatinous animals, such as egg yolk jellies and pelagic jellies, they often mistake plastics on the ocean surface for food which is a major contributor to their mortality. If you see plastic floating on the surface wherever you are, try to pick it up; you may save a turtles life. For more information on sea turtles, visit Hubbs Sea World Sea Turtle website.

Proposed Ban of Gill nets on Central Coast. The Department of Fish and Game (DFG) has proposed a year round closure on gill net and trammel net fishing from Point Reyes in Marin County south through Monterey County to Point Arguello in Santa Barbara to a depth of 60 fathoms or 360 feet. Hundreds of marine mammals such as harbor porpoises, seals and sea lions and sea otters die each year in the nets. The plight of common murres are also a major concern for biologists. Over the last century the population of common murres have plummeted due to oil spills, fishing, poaching, and coastal development has made them abandon coastal nesting sights. Biologists estimate that 2000-3000 common murres die each year in gill nets. The new proposal would permanently ban gill net fishing along the cental coast and biologists say it would save multitudes of marine mammals, sea birds and fish which are accidentally snared in the nets which have widely spaced mesh which entangles marine life.

Marine Mammal Conservation and Science Notes



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ACS National Summer "Humpback Trip" Phenomenal. For years Captain Fred Benko has been telling people about May encounters with humpback whales in the Santa Barbara Channel. Saturday, May 19, 2001, is a day ACS members and cetacean afficionados won't forget. The 88 foot Condor spend four hours Saturday surrounded by fifty humpback whales. Passengers saw almost every conceivable humpback behavior: breaching, lunge feeding, spy hopping, pec slapping, lob tailing, bubble nets, etc. The channel was so thick with anchovies that they were practically jumping into the Condor when the humpbacks lunge fed. "The sightings were so spectacular," said Katy Penland, ACS National President, "the Condor was an hour and a half late getting back into the harbor." Other sightings on the trip included minke whales, Risso's dolphin, Pacific white-sided dolphin, thousands of California sea lions feeding in association with the humpbacks, fifty-thousand sooty shearwaters, pelicans, cormorants, one Franklin's gull, and one sea otter in the waters just off the UCSB campus! Make plans to attend next years humpback trip on Captain Fred's new boat, the Condor Express. For information on whale watching in the Santa barbara Channel to observe humpback and blue whales call 805-963-3564.

Humpback Tubercles. The tubercles on the heads of humpback whales have puzzled biologists for years. Now biologists are suggesting that the lumps may help humpbacks maneuver. Researchers from Westchester University and Applied Fluids Engineering simulated the effects of tubercles on the edge of whale finds and found the lumps reduced drag by 10% and lift by 5%. The tubercles create a series of low pressure regions on the fins and upper surface: the regions increase lift and the split between decreases drag. The lumpy surface helps humpbacks to make tight turns and to pursue prey.

Northern Indian Ocean Blue Whales. Blue whales of the Northern Indian Ocean have been an enigma to marine biologists. Unlike other blue whale populations in the North Pacific and North Atlantic, the Indian Ocean blues cannot migrate to arctic waters in the northern summer and their whereabouts have been unknown. Some marine biologists have suggested that the whales migrate to the southern ocean but new evidence from whale strandings have cast doubt on that theory. Now biologists have suggested the monsoon season in India pushes water offshore in Somalia and Oman that results in upwelling of nutrient rich currents that produce plankton blooms. The blues may migrate to take

advantage of the seasonal changes. When winds subside in October they move back across the Arabian sea to the Maldives.

Bottlenose Dolphins Pass Mirror Test. Two independent studies by scientists Dr. Diana Reiss of Osborn Laboratories of Marine Science at the New York Aquarium and Dr. Lori Marino, a lecturer in neuroscience and behavioral biology at Emory University have reported that dolphins are able to recognize themselves in mirrors often taken as a sign of self awareness.

Both scientists say their studies lend support to the view that dolphins can develop some notion of themselves and others as distinct individuals, abilities usually associated with primates.

Bottlenose dolphins have become the first non-primates to pass the mirror test of self recognition. Mirror self recognition usually marks the beginning of self awareness, introspection and the ability to perceive the mental state of others.

Other recent dolphin research has reported that the animals are "able to interpret human pointing and gaze direction without prior training" as sign to some experts that dolphins can interpret thought and intentions of other animals.

A group of bottlenose dolphins moved into the Monterey Bay after the 1982-1983 El Niño and can be seen along beaches such as Del Monte, Seaside, Marina, Moss Landing and up along Santa Cruz County beaches usually just beyond the first wave.

Federal Protection Sought for Resident Killer Whales. The Center of Biological Diversity in Tucson Arizona has filed a petition asking the federal government to list resident killer whales of Washington State and Canada as "endangered" pursuant to the Endangered Species Act (ESA). The southern resident populations now only numbers about 83 individuals. The NMFS will review the petition and in 90 days decide whether it warrants action under the ESA.

"This tribe is facing extinction. These animals have been raised by their ancestors with specific languages foraging information and the use of the habitat" said Kelly Balcomb-Bartok, Field Researcher at the Center for Whale Research in Friday Harbor, Washington, which supports the petition.

Commercial fishing and logging have contributed to the loss of salmon, residents main prey. Whale watching has sometimes put 70 boats at a time in the whales' habitat. Exposure to land and marine pollutants have also negatively impacted the resident orcas.

Japan Resumes Whale Hunt. Japanese whalers left for North Pacific waters to kill 10-50 sperm and Brydes whales. Japan is allowed to kill a limited number of whales under a scientific research program approved by the International Whaling Commission. Japan defends the kill as a means of monitoring whale migration, population and feeding habits. 17 other nations have expressed opposition to Japan's hunt. ACS is completely opposed to this fraudulent science genocide.

Links:
ACS Monterey Bay Chapter website:
http://www.starrsites.com/acsmb
ACS National website:
http://www.acsonline.org
Monterey Bay Aquarium, Monterey
http://www.mbayaq.org/
Condor Cruises, San Barbara
http://www.condorcruises.com
Oceanic Society Expeditions, SF
http://www.oceanic-society.org
Island Packers, Ventura
http://www.islandpackers.com
Cetacean Society International
http://elfi.com/csi01202.html
National Marine Mammal Laboratory
http://nmml.afsc.noaa.gov/
Audubon Living Oceans Program
www.audubon.org/campaign/lo
Southwest Fisheries Science Center
http://swfc.ucsd.edu/dol_res.htm

CALENDAR

Beginning May 15

Channel Islands Whale Watching. The 88-foot Condor begins its all day whale watching to the Channel Islands on May 15. Santa Barbara offers some of the best whale watching in the world. Blue, Humpback, Fin, Minke Whales, and several species of dolphin are possible, including Orcas. $65/person. Trips depart Santa Barbara Harbor at 8AM and return between 3PM and 5PM. 805-963-3564.

Beginning June 2

Oceanic Society Farallon Islands Natural History & Whale Watch Cruises. Summer whale watching season begins June 2 with weekend and select Friday trips to the Gulf of the Farallons, one of the most biologically productive marine environments on the West Coast. Blue and humpback whales have been abundant in past summers and sightings of various dolphin and porpoise species are common. Call 415-474-3385.

Saturday, June 16

MBARI Open House, 12noon-5PM, 7700 Sandholdt Road, Moss Landing. Visit research vessels: Western Flyer and Point Lobos. See remotely operated vehicles: Ventana and Tiburon. Experience hands-on geology, biology and chemistry; explore careers in oceanography.

June 21-26

Second Symposium on Marine Conservation Biology. Location to be announced. For more information call visit www.seaotters.org.

ACS Blue Whale Cruises from the Santa Barbara Harbor on the 88 foot Condor

July 21 (ACS L.A. Chapter) and *August 4* (ACS National). In past years the Santa Barbara Channel has been considered the "Blue Whale Capital of the World". The 30 mile long shelf that extends from NW Santa Cruz Island to San Miguel Island has been home to as many as 200 feeding blue whales during certain seasons, such as in 1997. Blue Whales come into the Santa Barbara Channel and the CINMS every spring and summer to feed on the abundant krill resources that abound there. IN addition to Blue Whales other cetacean sightings might include humpback, minke and fin whales. There is also the opportunity to observe up to seven different dolphin species, including Dall's porpoise. Nobody is as familiar with blue whales as Captain Fred Benko who has been working with researchers such as john Calambokidis and Dr. Bruce Mate on various blue whale projects for the last 10 years. The Natural History of the Santa Barbara Channel and Channel Islands will also be expertly narrated. $65/person for ACS members; $70/person for non-members.

July 23 through August 24

UCSC, Summer Courses

The Ecology and Conservation of Marine Birds and Mammals (Ocean Science 158), *Monday, Wednesday & Friday, 8AM-11AM,* Long Marine Lab, Santa Cruz,. The systematics, physiology, ecology, behavior and conservation of marine mammals and birds. Exploration into fauna and issues of Monterey Bay. Lectures are combined with field studies and lab work.(continued on back page.)

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State_____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**

Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

CALENDAR, continued.

July 23 through August 24
UCSC, Summer Courses (continued)
Biology of Marine Mammals (Biology 139-01) Earth & Marine Sciences Building, *Monday, Wednesday & Friday 9AM-12PM.* A survey of cetaceans, pinnipeds, sirenians and sea otters including natural history, anatomy, physiology and conservation.
Natural History of Point Lobos (Environmental Science X451B) UC Summer Extension. *One weekend, 8AM Sat. June 23- 9AM Sun. June 24*, Point Lobos State Reserve. Hike for three miles and participate in this comprehensive field study of plant and animal interrelationships in the Reserve's beaches, tide pools, forests and offshore waters. Sea lions, sea otters, and harbor seals will be observed and discussed. Possible offshore sightings of cetaceans are possible. Instructor Jud Vandevere, former California State Park Naturalist and former elementary and community college instructor. Mr. Vandervere currently serves on the advisory committee for Friends of the Sea Otter and is a member of the Scientific Advisory committee for ACSMB.

Santa Catalina Island Summer Camp. You're never too young or too old to start learning about our ocean planet. Created by Jean-Michel Cousteau as part of Ocean Futures Society's environmental education program, this project is the first in what will become a network of educational programs spanning the globe and helping to prepare the next generation to become stewards of the planet they inhabit. Learn about kelp forest ecology, oceanography, ichthyology, and kayak and snorkel using science holistically to help students understand nature. Three programs are being offered: (1) Family Camp, *July 21 to 27*; (2) Kids Ages 11-14, *July 28-Aug 3*; (3) Kids Ages 15-18, *August 4-10.* For more information call 800-392-9004 or visit www.oceanfutures.org.

September 9, November 3
24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe Sperm, Blue, Fin, Gray and Beaked whales, and possibly Pilot whales and offshore dolphin species, as well as, late summer and fall pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or e-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

October 13
Friends of the Sea Otter Annual Meeting. 6PM at the Monterey Bay Aquarium.. Visit www.seaotters.org for more information.

American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

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Soundings

American Cetacean Society ~ Monterey Bay Chapter **June 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

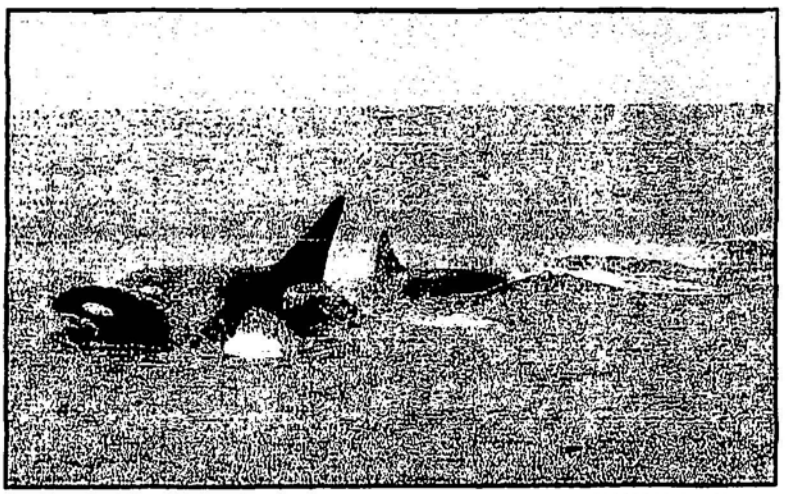
Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building
(Across from the American Tin Cannery Outlet Stores)

Date: Thursday, June 28th 2001

Time: 7:30 p.m.

Speaker: Tierney Thys, Sea Studios Foundation, Monterey and National Geographic Channel2

Title: Killer Whales of Peninsula Valdez, Patagonia



© 2000, Tony Lorenz

Killer whales, or Orcas, display different hunting behaviors and prey preferences throughout their worldwide distribution. While their habit of hunting pinnipeds is widely known (including in the Monterey Bay area), only in the Southern Hemisphere are they known to beach themselves in pursuit of Sea lions and Elephant seals.

Our speaker has just returned from Argentina, where in April she was able to camp on the beach at Peninsula Valdez with a photographic team from National Geographic. Here they observed four kills involving Southern Sea lion pups. Some 23 Orcas have been photo-identified over the years in this vicinity. We will learn what is known of this little studied population. The Peninsula Valdez National Park uplands are home to Guanaco, Patagonian fox, and Armadillos. Spectacular birds include the Rhea, an ostrich relative, and colonies of Magellanic penguins are nearby.

Tierney Thys received her Ph.D. from Duke University and has been working with Sea Studios on the soon to be released eight part television series The Shape of Life. The talk will include new video from the thirty minute National Geographic Special, to be aired in October.

Please join us for an unusually exciting evening.

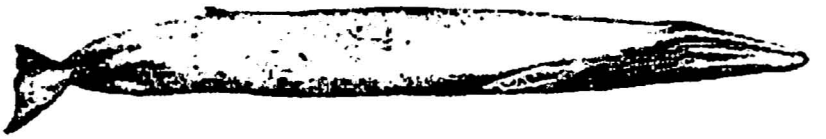
From the Editor...Tony Lorenz

ACSMB is pleased to announce that **Shawn Ranee Noren Kramer**, Doctoral student at U.C. Santa Cruz has been awarded the Robert D. Bethel Award grant in the amount of $600 for his proposal entitled **"The Development of Diving Characteristics in Bottlenose Dolphins."**

Abstract: Over evolutionary time, marine mammals have evolved physiological characteristics to enable long breath-hold durations required for locomotion and feeding. High oxygen stores in the blood and muscle, and the dive response (decreased heart rate at depth) enhance dive duration. Yet previous research on pinnipeds (seals and sea lions) has shown that youngsters lack these characteristics. Postpartum development is necessary for pinniped pups to acquire the muscle and blood oxygen stores of their adult counterparts (Horning and Trillmich 1997*a*, Burns *unpub data.*) The refinement of heart rate control also occurs during this developmental period. Both northern and southern elephant seal pups have higher heart rates, smaller differences between eupnea and apnea heart rates, and higher interbeat variability when compared to their adult counterparts (Castellini *et al.* 1994, Falabella *et al.* 1999). Furthermore, actual dive durations increase with maturation in pinnipeds (Lydersen *et al.* 1994, Horning and Trillmich 1997*b*, McCafferty *et al.* 1998). These increases in dive capacity were attributed to physiological changes in oxygen storage capacity, the dive response, and body size. However, pinnipeds experience postpartum development on land before their first trip to sea to acquire these essential characteristics for diving. Meanwhile, cetaceans (dolphins and whales) are born directly into the ocean and may be challenged immediately after birth until postpartum development for diving is completed. This study is the first to explore the development of characteristics for diving in any species of cetacean. Biochemical, physiological, and behavioral data will be collected from wild and captive bottlenose dolphins (*Tursiops truncatus*) to quantify changes in dive capacity with age. By understanding the physiological limitations of young dolphins, insight into possible diving constraints placed on mom-calf pairs will be granted. Assessing the constraints of the vulnerable segment of the population is important for management and conservation.

Congratulations Noren Kramer!

ACS Monterey Bay Chapter Blue Whale Quest
Saturday, August 25, 2001



Leaving at 9AM, from Sam's Sportfishing on Wharf 2, Monterey, on Saturday, August 25th on the 70 foot Sea Wolf II, join us for a privileged opportunity to search for the mighty blue whale.

Who can ever forget last year's trip. Yes, we did find blue whales and got excellent looks are the largest animals to have ever existed on earth. We also had great looks at killer whales and spent an hour with these magnificent animals. We also saw one minke whale, and a large group of Pacific white sided dolphin. Some people venture all over the world to experience the opportunity to observe blue whales or killer whales and here in Monterey Bay on just a six hour cruise we had both.

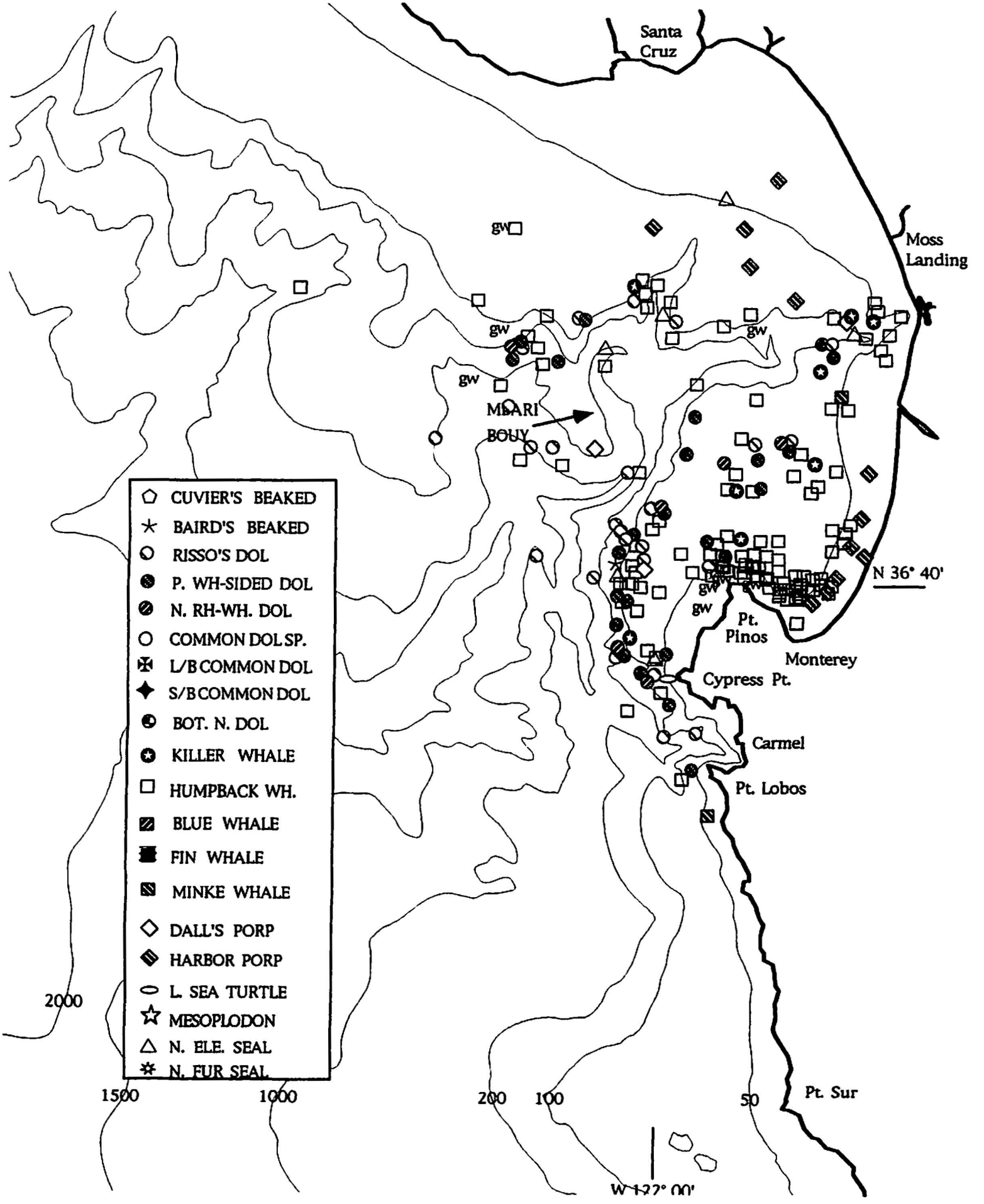
The California Mexico population of blue whales is the largest in the world with an estimated population of 2,200 individuals. Blue whales return every summer and fall to feed on krill in the Monterey Bay area. Last year the Monterey Bay was the best place in California to consistently observe blue whales during their summer and fall foraging migration. July and August is generally the best time of year to observe blue whales in Monterey Bay. That is when krill is generally most abundant in central coast waters. It is not unusual to have 100-200 feeding blue whales in the Monterey Bay region.

In addition to blue whales, sightings may include fin, humpback, minke, and killer whales, as well as, several dolphins species, Dall's and harbor porpoise, and several seabird species.

Expert naturalists will be onboard to provide narration and interpretation. $40 for ACS Members. $50 for non-members. For more information call Monterey Bay Whalewatch at 375-4658 or visit: www.gowhales.com.

Blue Whale Update

On the weekends of June 2 & 3 and 9 & 10 blue whales were seen off San Clemente Island. San Clemente Island is 40 nautical miles southwest of Long Beach, and is approximately 120 miles south of the northern Channel Islands where blue whales usually begin their summer feeding. On June 14 & 15 blue whales were seen at the east end of Santa Rosa Island foraging on krill. Dr. Bruce Mate's radio tags indicate that blue whales are currently foraging around Todos Santos Island just south of San Diego and will be in California waters any day now.


Santa Cruz
Moss Landing
gw
MBARI BOUY
N 36° 40'
Pt. Pinos
Monterey
Cypress Pt.
Carmel
Pt. Lobos
Pt. Sur
CUVIER'S BEAKED
BAIRD'S BEAKED
RISSO'S DOL
P. WH-SIDED DOL
N. RH-WH. DOL
COMMON DOL SP.
L/B COMMON DOL
S/B COMMON DOL
BOT. N. DOL
KILLER WHALE
HUMPBACK WH.
BLUE WHALE
FIN WHALE
MINKE WHALE
DALL'S PORP
HARBOR PORP
L. SEA TURTLE
MESOPLODON
N. ELE. SEAL
N. FUR SEAL
2000
1500
1000
200
100
50
W 122° 00'

ACS 5/30/01

Date	# of animals	Location
		HUMPBACK WHALE
There are 123 sightings of up to 25 individuals scattered throughout the Bay and outer waters.		
		GRAY WHALE
There are 9 sightings of up to 3 individuals, mostly in deep water and sometimes feeding on krill.		
		MINKE WHALE
5/3	1	Off Salinas River
5/4	1	8 mi S Santa Cruz
5/8	1	2 mi NW Moss Landing
5/19	1	.5 mi W Yankee Pt.
		BAIRD'S BEAKED WHALE
5/7	6	4 mi NW Pt. Pinos
5/13	12	5 mi WSW Pt. Pinos
		KILLER WHALE
5/2	7	4 mi SW Moss Landing
5/2	8	3.5 mi NW Pt. Pinos
5/14	5	1 mi W Cypress Pt.
5/14	1	4 mi N Pt. Pinos
5/14	6	2 mi SW Moss Landing
5/18	3	6.5 mi S Santa Cruz
5/29	5	2 mi SW Moss Landing
		RISSO'S DOLPHIN
There are 24 sightings of up to 400 individuals throughout the Bay and outer waters.		
		PACIFIC WHITE-SIDED DOLPHIN
There are 25 sightings of up to 2500 individuals scattered throughout the Bay and outer waters.		
		NORTHERN RIGHT WHALE DOLPHIN
5/5	300	5 mi WNW Pt. Pinos
Associated with 800 RISSO'S DOLPHIN and 500 PACIFIC WHITE-SIDED DOLPHIN.		
5/6	20	7 mi NW Pt. Pinos
5/6	100	9 mi S Santa Cruz
Associated with 700 PACIFIC WHITE-SIDED DOLPHIN and 200 RISSO'S DOLPHIN.		
5/10	50	3 mi SW Cypress Pt.
Associated with 100 RISSO'S DOLPHIN and 200 PACIFIC WHITE-SIDED DOLPHIN.		
5/24	50	5 mi SW Moss Landing
5/26	40	Near Cypress Pt.

Associated with 800 RISSO'S DOLPHIN and 20 PACIFIC WHITE-SIDED DOLPHIN.

DALL'S PORPOISE

5/9	5	2 mi W Moss Landing
5/12	7	3.5 mi W Pt. Pinos
5/20	12	8 mi NW Pt. Pinos

HARBOR PORPOISE

There are 11 sightings mostly in shallow water close to shore within the Bay.

NORTHERN ELEPHANT SEAL

5/20	1	9 mi S Santa Cruz
5/22	1	3 mi W Pt. Joe

CALIFORNIA SEA LION

Seen daily on Monterey breakwater and throughout the Bay. Numbers are augmented by male migrants heading S to breed.

HARBOR SEAL

Seen along rocky shores from Pt. Lobos to Monterey Harbor and in Elkhorn Slough.

SOUTHERN SEA OTTER

Seen along rocky shores from Pt. Lobos to Monterey Harbor and in Elkhorn Slough.

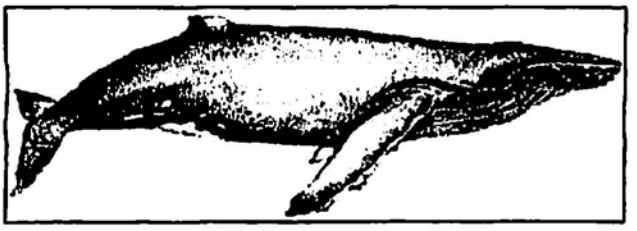
LEATHERBACK SEA TURTLE

5/10	1	.5 mi W Cypress Pt.

MARINE MAMMAL CONSERVATION & SCIENCE NEWS

2001 Right Whale Season Arial Survey. The Center for Coastal Studies conducted its last aerial survey of the season on May 11. The survey took them far to the east to Cape Cod, out to the waters of the Great South Channel, a known spring habitat for right whales. A few hours of surveying this productive habitat yielded cetacean sightings that numbered into the hundreds. Humpbacks, fin whales, minkes, sei whales, dolphin and harbor porpoise were seen.

18 Atlantic right whales were observed on the eastern side of the channel, most of which were feeding or resting at the surface. Over the next few months all of the right whale photographs will be analyzed and combined with other data in a fall annual report to the Commonwealth of Massachusetts.



NOAA Fisheries Finalizes Approach Regulations to Protect Humpback Whales in Alaska. Officials with the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service announced the completion of a final rule to protect humpback whales in Alaskan waters from disturbance by vessels. The regulations will take effect on July 2.

"We worked closely with the public and the whale watching industry to balance protection of whales with public demand for enjoyable whale watching opportunities" said Jim Balsiger, Alaska Regional Administrator for NOAA Fisheries. "The regulations are designed to protect the whales and to provide an enforcement tool to respond to situations that may threaten this endangered species." The rule limits the minimum approach to 100 yards requiring a slow safe speed when near a humpback whales and prohibits disruption of the whales normal behavior or prior activities. In response to public comments the minimum approach distance was reduced from the proposed 200 yards to 100 yards. This meets the distance requirements of the 1996 voluntary marine mammal viewing guidelines and with approach regulations for protection whales in Hawaiian waters.

Dolphin Interactions with Eastern Tropical Pacific Tuna Purse Seine Fishery. In the 1950s fishermen discovered that yellowfin tuna in the eastern tropical Pacific (ETP) aggregated beneath schools of dolphin species. Since that discovery the predominant tuna fishing method in the ETP has been to encircle schools of dolphin with a fishing net to capture the tuna concentrated below. Unfortunately hundreds of thousands of dolphin died in the early years of this fishing method before fishermen began to employ technologies to reduce dolphin mortality. Although dolphin mortality has declined in recent years there are three dolphin stocks currently listed as depleted: north eastern offshore spotted dolphin, coastal spotted dolphin and eastern spinner dolphin.

On June 6, 2001, NMFS published a Federal Registrar Notice of Receipt and Application Review for Scientific Research and is accepting public comment at this time. The application requests authorization to conduct a chase recapture experiment on dolphins in the ETP as one component of the stress studies mandated in Section 304(a)(3) of the Marine Mammal Protection Act as amended by the International Dolphin Conservation Program Act of 1997. The public is invited to comment on the scientific application and accompanying drafty environmental assessment before July 6, 2001. For more information about the tuna dolphin issue visit: noaa.gov/prot-res/pr2/tuna-dolphin/ocpa.html

Process Begins to Create New National Park in Mexico. The Organization Pronatura Peninsula de Baja California (PPBC) announced in February that it has initiated the procedures and technical studies designed to propose in collaboration with the local community the creation of a new national park in the area of Bahia de Los Angeles, Baja California. The new park will be located in the region of Grandas Islas in the Gulf of California and covers an area which is home to a large diversity of marine species including marine mammals. The Bahia de Los Angeles National Park will be designed to specifically include the area's islands, coasts and marine environment. For more information contact the PPBC's Gustavo Daneman at daneman@telnor.net.

Record Number of Manatees Counted in 2001. The first of three aerial surveys for 2001 seems promising for the Florida manatee. The count produced a total minimum number of 3,276 manatees. On Florida's Gulf Coast, observers counted 756 manatees, while observers on the east coast counted 1,520. The previous highest statewide minimum count was 2,639 obtained in 1996. The 2001 count was conducted by the Florida Fish and Wildlife Conservation Commission and the Florida Marine Research Institute. The count does not necessarily indicate that manatee populations are increasing. For more information about manatees visit www.savethemanatee.org/

Toxins & Cetaceans: Whale Meat Contains Dangerous Levels of Toxins and Is Unsafe for Human Consumption. Those who consume whale meat are not only perpetrating a crime against one of the most magnificent animals ever to evolve on earth, they are eating a deadly diet. Whale meat consumed by Norway and Japan may contain some of the worlds most pernicious toxins. A recent analysis of whale meat samples purchased in Norwegian and Japanese markets turned up dangerous levels of PCBs, including some chemicals that act as estrogen imitators elevating estrogen levels in women, "feminizing" men, and lowering sperms counts. Studies in highly regarded medical journals have reported new contaminants data from whale meat sampled in Japan, including mercury, some 1,600 times above the government permitted levels, as well as, large amounts of organic mercury and cadmium in whale meat that is sold in fish markets and whale sushi bars.

Dr. Roger Payne, one of the world's most respected whale scientists and an authority on PCBs and other toxic substances said the problem of contamination in the marine environment extends far beyond whales. In the next few years we could lose access to many ocean fisheries; several species are already to becoming too polluted to eat. "I am amazed by how few people recognize the seriousness of this issue."

Study Links Krill to Declining Numbers of Antarctic Fur Seals. A study by Keith Reid and John Croxall of the British Antarctic Survey has found that declining levels of krill has affected the breeding success of Antarctic fur seals (*Arctocephalus gazelle*), penguins and albatross around South Georgia. The study published by the Proceedings of the Royal Society of London collected 23 years of data on the stomach contents, numbers and breeding success of krill eating predators. It found that although all four species surveyed did well in the early 1980s, reproduction output crashed for the species in the late 1980s as demand for krill began to draw level with supply. As a result, Keith Rein commented that "rather than looking at managing krill just on its own, we have to look at how it is linked into the components of the ecosystem." It is believed that krill stocks may be affected by the melting of sea ice due to the rise in air temperature which has affected the Antarctic region for the last 50 years. For more information contact the British Antarctic Survey at: science@bcs.cc.uk

White Abalone Listed as Endangered. The white abalone-the most delectable and rarest of California's abalone populations-began receiving federal protection as an endangered species on

Tuesday, May 29th. White abalone were once so plentiful that diver's found 5,000 per acre of the marine snails in the waters off southern California. Now there are fewer than 2,600 adult white abalone scattered throughout their range from Point Conception north of Santa Barbara down through much of Baja's Pacific coast.

The NMFS will soon appoint a recovery team of scientists to figure out how to save the white abalone which were plundered in the 1970s by commercial and sport harvesting divers driven by an insatiable appetite for the mollusk.

Scientists estimate that more than 99% of the species has vanished, declining from as many as 4.25 million to somewhere between 1,613 and 2,540 individual animals today, according to scuba marine surveys. White abalone, like many abalone species, have been off limits to fishing in the California waters since 1996. White abalone, which sold for $100 or more for each animal before the State Department of Fish and Game ban took effect, still feel pressure from poaching.

White abalone usually live in depths of 70 to 200 feet and are mostly found in waters off the Channel Islands and farther out in underwater pinnacles surrounding Cortez and Tanner Banks as well as in coastal waters of central Baja California.

The spiral shelled animals can live 30 years or more and grow as big as 10 inches across. Commercial fishermen in California have not reported harvesting white abalone since 1992, coinciding with the general collapse of the abalone industry. Sea otters were largely absent from the southern California bight during the decline of the white abalone and therefore cannot be used as a scape goat for the depletion of this endangered marine invertebrate.

Molting Elephant Seals at Año Nuevo. Pinnipeds like other mammals must replace old skin and hair. Most mammals shed hair year-round, but elephant seals do it catastrophically. The molting process is so abrupt in elephant seals that it is called the catastrophic molt. During spring and summer months elephant seals return to Año Nuevo for their annual molts. Summer is a great time to visit Año Nuevo because hikes are not docent led and you are free to explore and spend more time at this spectacular reserve. Molting Schedule: May-June, sub-adult males; July-August, adult males. For more information call 650-879-0227 or 650-879-2025.

Marine Education Fund-raising Campaign. California State Parks, the California State Parks Foundation and the San Mateo Natural History Association are actively seeking funds in the amount of $2.25 million to construct a Marine Education Center at Año Nuevo State Reserve.

Año Nuevo has an annual visitation rate of over 200,000 persons per year. Visitors come primarily to experience elephant seals in their natural habitat. Through focused conservation education and protection of the natural resources the population of elephant seals is on the rise. Existing facilities at the reserve are not adequate to serve increasing number of visitors.

The proposed Marine Education Center will provide space for interpretive exhibits, educational facilities for school programs, and interpretive presentations as well as administrative center for the program complete with a meeting room, offices and small concession. For information on how you can help the project call the Reserve at 650-879-2025.

Channel Islands Multi-day Excursion Trips

Truth Aquatics in Santa Barbara is offering 2-3 day trips to the Channel Islands offering opportunities for whale watching, birding, kayaking, snorkeling, and hiking all on one trip. These trips give people the opportunity to live on board one of Truth Aquatics' fantastic dive boats replete with hot showers, hot meals, bunks and a professional, knowledgeable crew. Trips depart from Santa Barbara Harbor at 4AM and run to San Miguel, Santa Rosa and Santa Cruz Islands. For information call 805-962-1127 or visit www.truthaquatics.com/multiday.htm

Baja Whales & Wildlife
2002 Searcher Natural History Tours Schedule

Departure	Arrival	Cost
Saturday, February 2 San Diego	Sunday, February 10 Cabo San Lucas	$2,000

This 9-day tour includes hiking on offshore islands and whalewatching with the gray and humpback whales of the Pacific Ocean side of Baja California. Passengers board *Searcher* in San Diego and fly home from Cabo San Lucas.

Sunday, February 17 San Diego	Thursday, February 28 Cabo San Lucas	$2,750

This 12-day tour includes hiking on offshore islands and whalewatching with the gray and humpback whales of the Pacific Ocean side of Baja California, plus an extension into the southern Sea of Cortez where blue, humpback, fin, and sperm whales are found. We offer snorkeling with tropical reef fish at a variety of island stops on this tour. Passengers board *Searcher* in San Diego and fly home from Cabo San Lucas. This departure includes one more day of whalewatching in Laguna San Ignacio than the 11-day itinerary.

Sunday, March 3 San Diego	Wednesday, March 13 Cabo San Lucas	$2,475

This 11-day tour includes hiking on offshore islands and whalewatching with the gray and humpback whales of the Pacific Ocean side of Baja California, plus an extension into the southern Sea of Cortez where blue, humpback, fin, and sperm whales are found. We offer snorkeling with tropical reef fish at a variety of island stops on this tour. Passengers board *Searcher* in San Diego and fly home from Cabo San Lucas.

Sunday, March 17 San Diego	Wednesday, March 27 Cabo San Lucas	$2,475

Join the American Cetacean Society on this 11-day tour which includes hiking on offshore islands and whalewatching with the gray and humpback whales of the Pacific Ocean side of Baja California, plus an extension into the southern Sea of Cortez where blue, humpback, fin, and sperm whales are found. We offer snorkeling with tropical reef fish at a variety of island stops on this tour. Passengers board *Searcher* in San Diego and fly home from Cabo San Lucas.

Friday, March 29 Cabo San Lucas	Friday, April 5 Cabo San Lucas	$1,575

This 8-day tour includes whalewatching with the humpback, blue, fin, sperm, and more whales of the Sea of Cortez. We offer snorkeling with tropical reef fish and hiking at a variety of island stops on this tour. Passengers board *Searcher* in Cabo San Lucas and fly home from Cabo San Lucas.

Searcher Natural History Tours
Celia Condit & Art Taylor
2838 Garrison Street, San Diego
California 92106

searcher@bajawhale.com
Phone: (619) 226-2403
Fax: (619) 226-1332

CALENDAR

Beginning May 15

Channel Islands Whale Watching. The 88-foot Condor begins its all day whale watching to the Channel Islands on May 15. Santa Barbara offers some of the best whale watching in the world. Blue, Humpback, Fin, Minke Whales, and several species of dolphin are possible, including Orcas. $65/person. Trips depart Santa Barbara Harbor at 8AM and return between 3PM and 5PM. 805-963-3564.

Beginning June 2

Oceanic Society Farallon Islands Natural History & Whale Watch Cruises. Summer whale watching season begins June 2 with weekend and select Friday trips to the Gulf of the Farallons, one of the most biologically productive marine environments on the West Coast. Blue and humpback whales have been abundant in past summers and sightings of various dolphin and porpoise species are common. Call 415-474-3385.

ACS Blue Whale Cruises from the Santa Barbara Harbor on the 88 foot Condor

July 21 (ACS L.A. Chapter) and *August 4* (ACS National). In past years the Santa Barbara Channel has been considered the "Blue Whale Capital of the World". The 30 mile long shelf that extends from NW Santa Cruz Island to San Miguel Island has been home to as many as 200 feeding blue whales during certain seasons, such as in 1997. Blue Whales come into the Santa Barbara Channel and the CINMS every spring and summer to feed on the abundant krill resources that abound there. IN addition to Blue Whales other cetacean sightings might include humpback, minke and fin whales. There is also the opportunity to observe up to seven different dolphin species, including Dall's porpoise. Nobody is as familiar with blue whales as Captain Fred Benko who has been working with researchers such as john Calambokidis and Dr. Bruce Mate on various blue whale projects for the last 10 years. The Natural History of the Santa Barbara Channel and Channel Islands will also be expertly narrated. $65/person for ACS members; $70/person for non-members.

July 23 through August 24

UCSC, Summer Courses

The Ecology and Conservation of Marine Birds and Mammals (Ocean Science 158), *Monday, Wednesday & Friday, 8AM-11AM,* Long Marine Lab, Santa Cruz,. The systematics, physiology, ecology, behavior and conservation of marine mammals and birds. Exploration into fauna and issues of Monterey Bay. Lectures are combined with field studies and lab work.(continued on back page.)

Biology of Marine Mammals (Biology 139-01) Earth & Marine Sciences Building, *Monday, Wednesday & Friday 9AM-12PM.* A survey of cetaceans, pinnipeds, sirenians and sea otters including natural history, anatomy, physiology and conservation.

Natural History of Point Lobos (Environmental Science X451B) UC Summer Extension. *One weekend, 8AM Sat. June 23- 9AM Sun. June 24,* Point Lobos State Reserve. Hike for three miles and participate in this comprehensive field study of plant and animal interrelationships in the Reserve's beaches, tide pools, forests and offshore waters. Sea lions, sea otters, and harbor seals will be observed and discussed. Possible offshore sightings of cetaceans are possible. Instructor Jud Vandevere, former California State Park Naturalist and former elementary and community college instructor. Mr. Vandervere currently serves on the advisory committee for Friends of the Sea Otter and is a member of the Scientific Advisory committee for ACSMB.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State_____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**

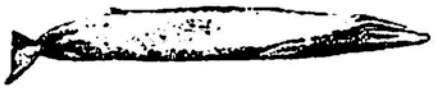
Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

CALENDAR, continued.

August 25

☆☆☆ **Don't Miss It** ☆☆☆



ACS Monterey Bay Chapter Blue Whale Quest. Leaving at 9AM. from Sam's Sportfishing on Wharf 2, Monterey, aboard the 70 foot SeaWolf II. For more information call Monterey Bay Whalewatch at 375-4658 or visit www.gowhales.com. Expert naturalists will be onboard for narration and interpretation. $40 for ACS Members. $50 for non-members.

Santa Catalina Island Summer Camp. You're never too young or too old to start learning about our ocean planet. Created by Jean-Michel Cousteau as part of Ocean Futures Society's environmental education program, this project is the first in what will become a network of educational programs spanning the globe and helping to prepare the next generation to become stewards of the planet they inhabit. Learn about kelp forest ecology, oceanography, ichthyology, and kayak and snorkel using science holistically to help students understand nature. Three programs are being offered: (1) Family Camp, *July 21 to 27*; (2) Kids Ages 11-14, *July 28-Aug 3*; (3) Kids Ages 15-18, *August 4-10.* For more information call 800-392-9004 or visit www.oceanfutures.org.

September 9, November 3

24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe sperm, blue, fin, beaked whales, and possibly pilot whales and offshore dolphin species, as well as, late summer and fall pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or e-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

October 13

Friends of the Sea Otter Annual Meeting. 6PM at the Monterey Bay Aquarium.. Visit www.seaotters.org for more information.

Nov. 28-Dec.3

14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconfernce.org

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American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

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Soundings

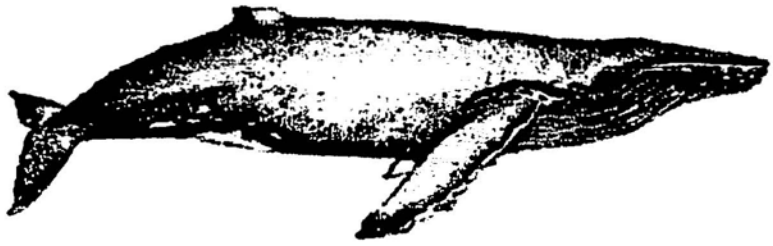
American Cetacean Society ~ Monterey Bay Chapter July, **June 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)



Date: Thursday, July 26th 2001

Time: 7:30 p.m.

Speaker: Esta Lee Albright, Whale Watch Naturalist

Title: The Humpback Whales of Silver Bank, Dominican Republic

In fall about 6,000 North Atlantic Humpbacks migrate south and converge in the waters off the Caribbean Island of Dominican Republic, where they mate and give birth. The largest concentration is near the Dominican Republic's sanctuary for marine mammals at Silver Bank, Navidad Bank and Samana Bay.

Our speaker spent a week in March 2001 as a naturalist living aboard a tour boat among the whales about 70 miles offshore on Silver Bank. She will compare and contrast the behavior of Pacific Humpbacks feeding here in Monterey Bay with the Atlantic Humpbacks on their breeding grounds.

She will discuss the protection guidelines, education and certification of boat operators in the Sanctuary. And ,of course, will talk and show a video, of the adventure of living offshore for six days and the "soft-in-water" encounters with the whales. Silver Bank is unique, along with the island of Tonga, in offering this opportunity to observe Humpbacks while in the water nearby.

Esta Lee Albright is well known to members and friends. She is a founding member and former President and Newsletter Editor of our ACS Chapter. A retired College Librarian, she works as a naturalist/interpreter for Monterey Bay Whalewatch and is a popular lecturer for Elderhostel. Please join us for a most interesting perspective of these spectacular giants.

American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

From the Editor...Tony Lorenz

ACSMB is pleased to announce that Stori C. Oates, Masters of Marine Science Candidate, Moss Landing Marine Laboratories has been awarded the Monterey Sport Fishing and Sabu Shake, Sr. Award grant in the amount of $500 for the proposal entitled "Impacts of dispersal and foraging ecology on the survivorship of Pacific harbor seal (*Phoca vitulina richardsi*) juveniles in central California".

Abstract: Despite numerous studies of Pacific harbor seal (*Phoca vitulina richardsi*) in central California, few have focused on the factors that impact survivorship of juvenile seals. Preliminary studies indicate harbor seals disperse in search of available haul out sites (resting areas) or foraging area. During this vulnerable time, juveniles are susceptible to predation, disease, and fishery interactions; thus, first year survival is less than subsequent years. Starvation also is a primary cause of mortality for inexperienced harbor seals; thus, animals dispersing to areas of increased productivity may have increased survival rates because of abundant food supply. The objectives of this study are 1) to compare movement patterns among different age classes in harbor seals, 2) to determine foraging locations and food habits of juvenile seals, and 3) to estimate juvenile survivorship of harbor seals along the central California coast. I hypothesize that weaned pups will disperse from their natal sites, whereas, yearlings will exhibit localized movements similar to those of adult seals. I further hypothesize that juvenile harbor seals will eat smaller, more diverse prey than adult seals and importance of prey species will differ among age classes and seasons. I also predict that juvenile harbor seals foraging in productive near shore areas will have greater survivorship rates than those foraging in less productive areas. Fifteen weaned pups and 15 yearlings will be captured and radio tagged at principal haul out sites in or near Monterey Bay, California (Pebble Beach, Elkhorn Slough) from May to July 2001. Land and aerial surveys will be conducted throughout the year to monitor movements and estimate foraging locations of tagged seals. To compare types of prey consumed by juvenile and adult harbor seals, all captured seals will be give enemas to recover fecal samples from the colon. To determine whether movement patterns and foraging ecology influence juvenile survival, estimates also will be made at monthly intervals. Because of increasing exposure to anthropogenic effects such as agricultural run off and oil spills, and increasing interactions with fisheries, it is important to understand how factors such as dispersal, foraging ecology and juvenile survivorship influence harbor seal population dynamics along the central coast of California. Variation in past survival estimates reflects the uncertainty and lack of field data available for this species. Better data, therefore, are needed to estimate juvenile survivorship and to evaluate the status of harbor seal populations.

Congratulations Stori !!

ACS Monterey Bay Chapter Blue Whale Quest
Saturday, August 25, 2001

Leaving at 9AM, from Sam's Sportfishing on Wharf 2, Monterey, on Saturday, August 25th on the 70 foot Sea Wolf II, join us for a privileged opportunity to search for the mighty blue whale.

Who can ever forget last year's trip. Yes, we did find blue whales and got excellent looks are the largest animals to have ever existed on earth. We also had great looks at killer whales and spent an hour with these magnificent animals. We also saw one minke whale, and a large group of Pacific white sided dolphin. Some people venture all over the world to experience the opportunity to observe blue whales or killer whales and here in Monterey Bay on just a six hour cruise we had both.

The California Mexico population of blue whales is the largest in the world with an estimated population of 2,200 individuals. Blue whales return every summer and fall to feed on krill in the Monterey Bay area. Last year the Monterey Bay was the best place in California to consistently observe blue whales during their summer and fall foraging migration. July and August is generally the best time of year to observe blue whales in Monterey Bay. That is when krill is generally most abundant in central coast waters. It is not unusual to have 100-200 feeding blue whales in the Monterey Bay region.

In addition to blue whales, sightings may include fin, humpback, minke, and killer whales, as well as, several dolphins species, Dall's and harbor porpoise, and several seabird species.

Expert naturalists will be onboard to provide narration and interpretation. $40 for ACS Members. $50 for non-members. **For reservatons and more information call 373-2274.**

Blue Whale Update -- Blues Arrive!

The first significant sightings of blue whales occurred in Monterey waters during the weekend of July 14-15. Local whale watch and fishing boats reported sighting of blue whales at various locations in and around Monterey Bay. A very large group of blue and fin whales was reported by albacore fishermen 30 miles west of Point Piños on Thursday July 12. Captain Dave Lemon reported 15 blue whales off the Little Sur River on Sunday, July 15.

FACT SHEET
Save the Albatross Campaign: Keeping Seabirds off the Hook in the North Pacific Ocean

The National Audubon Society's Living Oceans Program is working to support BirdLife International's *Save the Albatross Campaign: Keeping the World's Seabirds off the Hook.* The campaign addresses an acute problem facing the world's seabirds: the drowning of albatrosses and petrels on longline hooks, threatening some species with extinction.

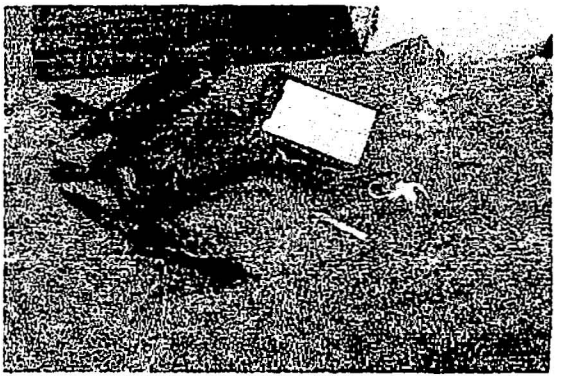
Seabirds in the North Pacific Ocean are being accidentally killed in the tens of thousands by longline fishing. Birds scavenging from longline vessels swallow baited hooks or are entangled in fishing gear, are dragged underwater, and drown. Of the numerous threats facing these albatross species, ranging from ingestion of plastics to global climate change, scientists consider that incidental bycatch in longline fisheries is perhaps the most significant.

The Three North Pacific Albatrosses

Although many people think of albatrosses as birds of the Southern Oceans, there are three species that occur in the North Pacific. In the North Pacific, short-tailed *Phoebastria albatrus*, black-footed *P. nigripes* and Laysan *P. immutabilis* albatrosses are found.

Recent calculations indicate that black-footed albatrosses cannot withstand losing more than 10,000 birds per year; more than that will drive a decline. The limited information scientists have suggests that tuna and swordfish longlines *alone* are killing more than this even without considering mortality from bottom-longline fisheries for halibut and cod, or natural mortality.

The total population of short-tailed albatrosses is approximately 1,500 birds, with numbers recovering from near extinction in the 1940s. The average population increase is more than 7% annually and is expected to improve as management actions improve nesting habitat, although the species is still regarded as Vulnerable by IUCN. The black-footed albatross, with a population of approximately 300,000 birds, is also classified as Vulnerable. There has been a 9.6% decline in the number of breeding pairs from 1992 to 2001. The Laysan albatross, the most abundant of North Pacific albatrosses, has a population of approximately 2.4 million birds, and, although not currently regarded as threatened with extinction, there has been a 30% decline in the number of breeding pairs from 1992 to 2001. These recent, short-term declines in breeding pairs could result from numerous causes, such as increased rates of skipped breeding, which might be due to depleted food resources caused by El Nino and general warming of the oceans, or the cause of the declines could be various sources of mortality, of which one of the more significant is interactions with longline fisheries.



Another black-footed albatross becomes a victim of longline fisheries (photo courtesy of the U.S. National Marine Fisheries Service Observer Program).

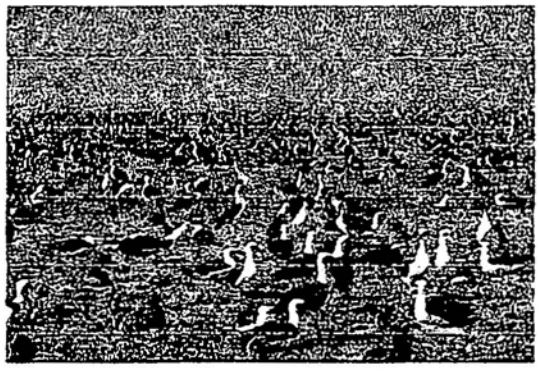
Preventing Seabird Bycatch

Various cost effective "mitigation measures" have been developed for use in longline fisheries to avoid and minimize seabird bycatch, such as:

- Bird-scaring lines: Lines are towed during longline setting and are fitted with streamers that flutter in the breeze and scare seabirds away from the baited hooks.
- Underwater setting: The longline is set underwater through a tube or chute to keep baited hooks out of seabirds' reach.
- Line-weighting: Weights are added to the longline gear to increase the sink rate of the baited hooks to avoid catching seabirds.
- Night setting: Longlines are set at night so baited hooks are not easily located by seabirds.
- Blue-dyed bait: Dyeing baits blue reduces seabirds' ability to see baits.

In the North Pacific, some mitigation measures are required in some U.S. longline fisheries, but mitigation measures are not in use by the vast

majority of longline fleets. In the North Pacific, the major high-seas pelagic longlining nations that operate within the range of North Pacific albatrosses are Japan, Taiwan, and Republic of Korea, and the major demersal longlining nations are the U.S., Canada, Russia, Japan, China, Republic of Korea, and Taiwan. Of these countries, data on seabird bycatch in longline fisheries from onboard observers are available only from some U.S. fisheries.



99% of the world's Laysan Albatrosses *Phoebastria immutabilis* and 98% of the global population of black-footed Albatrosses*P. nigripes* nest in the North-western Hawaiian Islands, where they are threatened by interactions with longline vessels in the North Pacific (photo courtesy of the U.S. Fish and Wildlife Service).

National Audubon Society Living Oceans Program's Role in the "Save the Albatross Campaign"

Acting locally, regionally, and globally, the Living Oceans Program is working to reduce seabird bycatch by:

- Producing an educational video for longline fishers on seabird handling techniques.
- Working with longline fishing nations in the North Pacific to ensure they adopt effective and rigorous National Plans of Action for reducing incidental catch of seabirds in longline fisheries, and adopt and enforce effective and stringent measures to reduce seabird bycatch.
- Through the "Just Ask" campaign, using tools such as the Audubon Fish Card and Seafood Lover's Almanac, we are priming the public to begin thinking about the sustainability of the seafood they eat, ensuring that U.S. consumers only purchase seafood caught by seabird-friendly methods, and specifically avoid Patagonian toothfish caught in pirate (illegal, unregulated, and unreported) Southern Ocean fisheries.
- Working with the Hawaii Longline Association to introduce underwater setting technology to the Hawaii-based swordfish longline fishery.
- Supporting development of an international agreement to conserve Northern Hemisphere albatrosses and petrels, and effective implementation of the recently adopted Agreement on the Conservation of Albatrosses and Petrels, which focuses on conservation of these species in the Southern Hemisphere.

What Can You Do?

- Support the National Audubon Society in its work to keep albatrosses and other seabirds off the hook.
- Write to your government fishery management agencies to ask what they are doing to promote seabird-friendly longline fisheries. Suggest that they work with the longline industry to assess the extent of seabird bycatch, and test mitigation measures to identify practicable and effective measures, as is being done in Alaska and Hawaii. Urge them to have adequate onboard observer programs in place to enable an accurate assessment of seabird bycatch and the effectiveness of seabird mitigation measures. Urge them to require stringent seabird mitigation measures in longline fisheries that have a seabird bycatch problem.
- Try and find out if the fish you purchase or order from a restaurant was caught by a seabird-friendly longline method, and avoid it if it was not. Avoid eating bluefin tuna and Patagonian toothfish (also called Chilean or Antarctic seabass, black hake, or mero) that may have been caught by pirate longline fisheries.

For additional information

Contact: Eric Gilman
National Audubon Society
Living Oceans Program
2718 Napuaa Place
Honolulu, HI 96822 USA

BirdLife International Seabird Conservation Programme website:
www.uct.ac.za/depts/stats/adu/seabirds
http://www.audubon.org/campaign/lo/save_albatross.html

List of Marine Mammal Sightings in the Monterey Bay Region

June 1 - June 30, 2001
compiled by Richard Ternullo

Date	#	Type of Animal(s)
6/30	7	Humpback Whales
6/29	1	Humpback Whale
	4	Blue Whales
	20	Pacific White Sided Dolphins
6/28	5	Humpback Whales
	25	Pacific White Sided Dolphins
6/27	8	Humpback Whales
	3	Harbor Porpoise
6/26	1	Humpback Whale
	25	Pacific White Sided Dolphins
	10	Northern Right Whale Dolphins
	3	Dall's Porpoise
	13	Harbor Porpoise
6/25	14	Humpback Whales
	1	Blue Whale
	250	Pacific White Sided Dolphins
6/24	2	Humpback Whales
	200	Pacific White Sided Dolphins
6/23	4	Humpback Whales
	250	Pacific White Sided Dolphins
6/22	8	Humpback Whales
	100	Dolphins
6/21	3	Humpback Whales
	6	Baird's Beaked Whales
	200	Pacific White Sided Dolphins
	10	Risso's Dolphins
	10	Black-footed Albatross
6/20	7	Humpback Whales
	475	Pacific White Sided Dolphins
	4	Northern Right Whale Dolphins
6/19	9	Humpback Whales
	1	Harbor Porpoise
6/18	4	Humpback Whales
6/17	3	Humpback Whales
6/16	6	Humpback Whales
6/15	9	Humpback Whales
6/14	2	Humpback Whales
	1	Killer Whale
	200	Pacific White Sided Dolphins
6/13	4	Humpback Whales
	50	Pacific White Sided Dolphins
	3	Dall's Porpoise
	5	Harbor Porpoise
6/12	3	Humpback Whales
6/11	2	Humpback Whales
	4	Harbor Porpoise
6/10	3	Humpback Whales
	20	Dall's Porpoise
6/9	3	Humpback Whales
	103	Pacific White Sided Dolphins
6/6	3	Humpback Whales

	206	Pacific White Sided Dolphins
6/5	2	Killer Whales
	30	Pacific White Sided Dolphins
6/4	12	Pacific White Sided Dolphins
	5	Northern Right Whale Dolphins
6/3	1	Humpback Whale
	208	Pacific White Sided Dolphins
	3	Risso's Dolphins
6/2	4	Killer Whales
	58	Pacific White Sided Dolphins
6/1	4	Humpback Whales

Local Whale Watching

Monterey Bay Whalewatch One 4-6 hour trip daily. 9AM - 2:30PM Call 831-375-4658 for information and reservations.	**Monterey Sport Fishing & Cruise** Two 3 hours trips daily. 10AM-1PM & 1PM-4PM. Call 831-372-2203 for information and reservations.

CONSERVATION NOTES

Update on the Southern Resident Killer Whale Population

The Center for Whale Research reports seven killer whales missing from the Southern Community orca population as the whales return to the San Juan Islands for the summer.

After several weeks of careful observation of the southern resident killer whale pods in and around the San Juan Islands, the Center for Whale Research has confirmed seven whales are missing from the population.

For 26 years the Center for Whale Research has been documenting the pods of killer whales that frequent the inland waters of Washington and southern British Columbia, maintaining both a photographic catalogue of every individual, as well as, charting the social structure of the entire population. Staff at the Center noticed the missing animals as the pods returned to the San Juan Islands last month.

L-pod, the largest of the three resident pods, first arrived in the San Juan Islands May 20, whereupon staff members with the Center began a detailed inventory of the returning orcas. Upon closer inspection several individuals were notably absent and after several encounters during the following weeks, six whales are now been regarded as missing.

K-pod also returned to the region on May 20, and while one new calf (K-33) has been observed, another calf born in November did not survive the winter, bringing the total number of animals missing to seven.

Missing orcas include: L-1, L-11, L-39, L-62, L-98, L-99 and K-32.

Society for Marine Mammalogy Encourages Mexican President Fox to Protect Endangered Vaquita

The Society for Marine Mammalogy notes that the upper Gulf of California has been designated by Mexico as a Biological Reserve, and that Mexico is a member of the International Committee for the Recovery of the Vaquita (CIRVA). The endeavors will aid in the protection of vital habitat and recovery of this species. The Society for Marine Mammalogy encourages President Fox and the Mexican government to support the development and implementation of a recovery plan for the Vaquita that addresses the biological needs of the species, as well as, the social and economic needs of Baja California communities. The Society for Marine Mammalogy is an international society of more than 2000 scientists who study whales, dolphins, porpoises, seals and other marine mammals. It is the largest professional society in the world dedicated to the study of marine mammals. Visit http://pegasus.cc.ucf.edu/~smm for more information.

Threat to Sea Lions from Mexican Development

Environmentalists are protesting a new threat to wildlife, including California sea lions, particularly in the Gulf of California, after the Mexican government revealed plans to develop a chain of upscale marinas along 4000 km of Baja California coastline. The plan, called "Nautical Steps" is aimed at attracting 1.6 million boat owners in the United States to a new system of harbors,

wharves, hotels and restaurants. The Gulf of California is home to an extremely diverse and abundant array of marine wildlife, called "probably the richest sea in the world in biodiversity" by the Mexican Environment Minister.

Ocean Conservancy Pushes for Ocean Wilderness Designation

The Ocean Conservancy announced June 19th that it will be pressing for five ocean sites in the United States and one in the Carribean to be designated as wilderness areas. Included in the proposal are four sites which provide habitat for marine mammals - Prince William Sound and Glacier Bay, both in Alaska, the Channel Islands in California, and the Northwestern Hawaiian Islands. Oceans Conservancy called the sites the "cornerstones" of its plan to have at least as much ocean as land designated as wilderness in the United States.

First Conformed Monk Seal Birth on Kahoolawe Bay

On June 22, a team from the U.S. Federal NOAA Fisheries measured and tagged a male Hawaiian monk seal pup (*Monachus schauinslandi*) born early in May on the former bombing target island of Kahoolawe, situated off Maui in the Hawaiian Islands. The monk seal pup is the first ever confirmed birth of a pup on the island, and is one of only four pups known to have been born in the main Hawaiian Islands this year. Work crews which are clearing the island of explosives have maintained a 200 meter secured radius around the pup since its birth and have monitored it on a day to day basis. The workers were described as being thrilled about the birth and proud that it had taken place on the island. For more information contact NOAA Fisheries, Margaret Dupree at margaretdupree@noaa.gov.

Florida Marine Mammal Health Conference

The University of Florida, College of Veterinary Medicine is excited to announce this conference to be held at the University of Florida Hotel and Conference Center in Gainesville, Florida on April 4-7, 2002.

The purpose of this conference is to promote the health and well being of four principal species of marine mammals found in Florida waters - manatees, bottlenose dolphins, pygmy sperm whales and northern right whales. The four day conference will bring together approximately 300 people working on these and other marine mammals in order to address the current health status of these animals and the future direction of investigation and action that are likely to produce benefits to their health and survival.

Sperm Whales Sighted in the Gulf of Mexico

To the surprise of marine biologists a significant number of endangered sperm whales appear to be making a permanent home in the Gulf of Mexico near the dangerously busy mouth of the Mississippi River.

The emergence within a few miles of the Louisiana coast is remarkable because sperm whales rarely hunt so close to shore or stay in one place for too long.

The presence of 500 or so of the sperm whales, some of them up to 60 feet in

length, belies the northern Gulf's reputation as a growing "dead zone" of low oxygen water where marine life is being smothered.

"We didn't expect to be running into sperm whales right off the Mississippi Delta in the middle of so much activity" said Randall Davis of Texas A&M University at Galveston. Their endangered status is supposed to afford them additional consideration for their protection, but the whales have not yet received a lot of attention. Industry Officials say companies are exploring and drilling safely around the whales in compliance with the federal Endangered Species Act and the Marine Mammals Protection Act.

The sperm whales could be on a collision course with the Bush administration. The northern Gulf is one of the world's most important oil fields. Drilling in deeper waters is a crucial part of the White House's plan to expand energy production.

At one time there were estimated two million sperm whales throughout the world. In 1964, a peak year for sperm whale harvest, 29,255 were killed. Present population estimates are the subject of controversy among the world's experts on whale populations, but there may be as few as 500,000 worldwide.

Sperm whales seldom swim into waters shallower than 200 meters (650 feet) and so are rarely seen from shore. To obtain the ton of food they require each day they can dive to remarkable depths of 8,000 to 10,000 feet. The whales find their prey, mostly squid and octopuses, using their remarkable echolocation in total darkness.

In California waters, prey fish include long nosed skates, lingcod, hake, and rock fish. Between dives, sperm whales may remain at the surface for more than an hour blowing 10-50 times before submerging. Off central California sperm whales are fairly common along the seaward edge of the continental shelf from November through April. In southern California waters the whales usually stay further offshore but are occasionally seen around the Channel Islands.

Save Our Shores Sanctuary Steward Program

Starting Sept 12th - Save Our Shores Sanctuary Steward Program. A 7 week course (1 night per week) to train individuals in marine ecology, marine education and current issues facing the Monterey Bay National Marine Sanctuary. Join to learn a variety of topics on sanctuary habitats and wildlife, deep sea research, coastal erosion, fisheries management, marine protected areas, water quality, human impacts and more. $25.00 (student and senior discount available). Contact Fleur O'Neill or Sarah Mangan at (831 462 5660 xt. 13) for more information.

Action Alert submitted by Kaitilin Gaffney, The Ocean Conservancy

California's Coast and Ocean Needs Your Support

There is a growing scientific consensus that establishing fully protected marine reserves will result in long lasting increases in the abundance, diversity, and productivity of marine organisms and that a network of marine reserves will be necessary for long-term conservation of fisheries and biodiversity. In spite of the proven effectiveness of marine reserves, currently California has only a few small areas completely off limits to fishing. Their combined area covers less than 0.2% of state coastal waters!

The Marine Life Protection Act, passed in 1999, is a landmark law that will create an effective system of marine protected areas along the state's coast. The Act was designed to strengthen the protection of California's coastal and ocean areas. It is the first law of its kind passed anywhere in the U.S. Your support is needed to ensure that the MLPA creates an effective system of marine reserves and other marine protected areas (MPA) in California.

Write to the Department of Fish and Game to express your support for marine reserves. Address your letters to: Paul Reilly, DFG, 20 Lower Ragsdale Drive, Monterey CA 93940, FAX: (831) 649-2894, EMAIL: preilly@dfg.ca.gov.

For more information on the MLPA process and for upcoming public hearings on the MLPA in an area near you, visit the DFG's Marine Life Protection Act web page at http://www.dfg.ca.gov/mrd/mlpa.

For more information, contact Kaitilin Gaffney at The Ocean Conservancy, Phone: (831) 425-1363, Email: kgaffney@psinet.com

Sample messages for letters to Fish and Game:

* *Marine reserves protect biodiversity and healthy ecosystems. I support protecting California's coastline in marine life reserves.*

* *Special places in the ocean deserve full protection, just as they do on land. I urge you to create fully protected parks off Año Nuevo, Piedras Blancas, in the Farallones underwater pinnacles, off Point Reyes Headlands, and in other scenic or diverse underwater areas.*

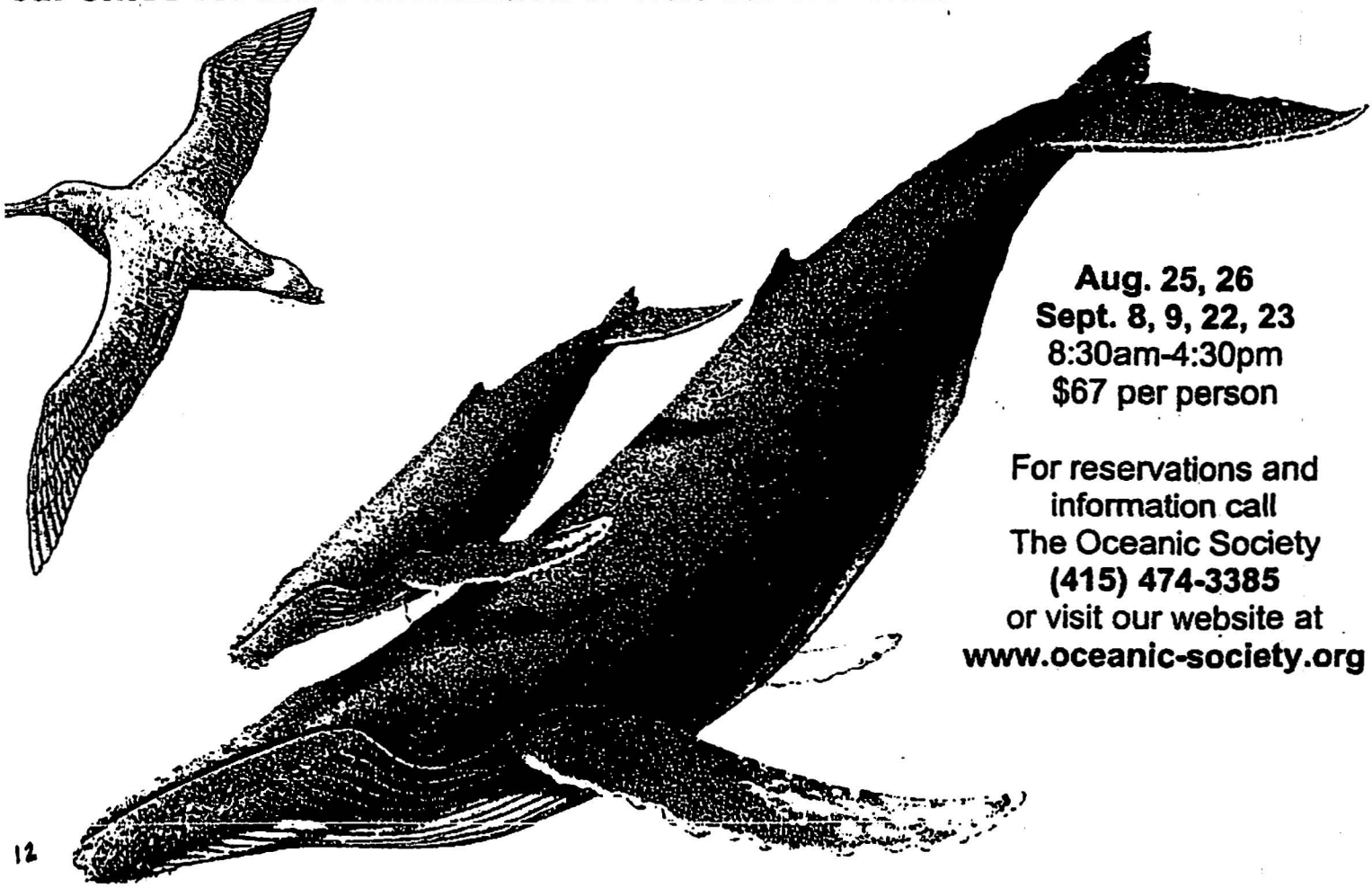
* *Many marine species are in trouble. The marine reserve network should be big enough to help marine species populations recover and provide insurance against disasters and management mistakes.*

Oceanic Society announces expansion of 18 year old Farallon Islands Summer Program by offering

CORDELL BANK NATURE CRUISES

Cordell Bank is located 52 miles northwest of San Francisco just west o Point Reyes and Bodega Head. Monterey Bay, Gulf of the Farallones, an Cordell Bank comprise the National Marine Sanctuary located off the coas of California. The bank rises to within 150 feet of the Pacific Ocean's surface and has been noted as "one of the most biologically productive areas on the West Coast." View a wide variety of marine life including humpback and blue whales, porpoises, and abundant seabirds as they feed in this lush marine environment.

Advance reservations are required for this 8 hour excursion leaving from Bodega Bay. The program will be conducted only on select weekends in August and September. All of our tours are led by expert naturalists. Call our office for more information or visit our website.



Aug. 25, 26
Sept. 8, 9, 22, 23
8:30am-4:30pm
$67 per person

For reservations and information call
The Oceanic Society
(415) 474-3385
or visit our website at
www.oceanic-society.org

CALENDAR

Beginning May 15

Channel Islands Whale Watching. The 88-foot Condor begins its all day whale watching to the Channel Islands on May 15. Santa Barbara offers some of the best whale watching in the world. Blue, Humpback, Fin, Minke Whales, and several species of dolphin are possible, including Orcas. $65/person. Trips depart Santa Barbara Harbor at 8AM and return between 3PM and 5PM. 805-963-3564.

Beginning June 2

Oceanic Society Farallon Islands Natural History & Whale Watch Cruises. Summer whale watching season begins June 2 with weekend and select Friday trips to the Gulf of the Farallons, one of the most biologically productive marine environments on the West Coast. Blue and humpback whales have been abundant in past summers and sightings of various dolphin and porpoise species are common. Call 415-474-3385.

July 23 through August 24

UCSC, Summer Courses

The Ecology and Conservation of Marine Birds and Mammals (Ocean Science 158), *Monday, Wednesday & Friday, 8AM-11AM,* Long Marine Lab, Santa Cruz,. The systematics, physiology, ecology, behavior and conservation of marine mammals and birds. Exploration into fauna and issues of Monterey Bay. Lectures are combined with field studies and lab work.(continued on back page.)

Biology of Marine Mammals (Biology 139-01) Earth & Marine Sciences Building, *Monday, Wednesday & Friday 9AM-12PM.* A survey of cetaceans, pinnipeds, sirenians and sea otters including natural history, anatomy, physiology and conservation.

July 26

Tracking Blue Whales with John Calambokidis. "Tracking Blue Whales Underwater and Around the North Pacific" will be the topic of a presentation by John Calambokidis July 26 at 7pm at the Santa Barbara Maritime Museum Munger Theater. The presentation includes "Critter Cam" footage collected by Cascadia Research and National Geographic.

August 4

ACS Blue Whale Cruises from the Santa Barbara Harbor on the 88 foot Condor. In past years the Santa Barbara Channel has been considered the "Blue Whale Capital of the World". The 30 mile long shelf that extends from NW Santa Cruz Island to San Miguel Island has been home to as many as 200 feeding blue whales during certain seasons, such as in 1997. Blue Whales come into the Santa Barbara Channel and the CINMS every spring and summer to feed on the abundant krill resources that abound there. IN addition to Blue Whales other cetacean sightings might include humpback, minke and fin whales. There is also the opportunity to observe up to seven different dolphin species, including Dall's porpoise. Nobody is as familiar with blue whales as Captain Fred Benko who has been working with researchers such as john Calambokidis and Dr. Bruce Mate on various blue whale projects for the last 10 years. The Natural History of the Santa Barbara Channel and Channel Islands will also be expertly narrated. $65/person for ACS members; $70/person for non-members.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____ State_____ Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**

Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

CALENDAR, continued.

August 25

☆☆☆ **Don't Miss It** ☆☆☆

ACS Monterey Bay Chapter Blue Whale Quest. Leaving at 9AM, from Sam's Sportfishing on Wharf 2, Monterey, aboard the 70 foot SeaWolf II. For more information and reservations call 373-2274. Expert naturalists will be onboard for narration and interpretation. $40 for ACS Members. $50 for non-members.

Santa Catalina Island Summer Camp. You're never too young or too old to start learning about our ocean planet. Created by Jean-Michel Cousteau as part of Ocean Futures Society's environmental education program, this project is the first in what will become a network of educational programs spanning the globe and helping to prepare the next generation to become stewards of the planet they inhabit. Learn about kelp forest ecology, oceanography, ichthyology, and kayak and snorkel using science holistically to help students understand nature. Three programs are being offered: (1) Family Camp, *July 21 to 27*; (2) Kids Ages 11-14, *July 28-Aug 3*; (3) Kids Ages 15-18, *August 4-10.* For more information call 800-392-9004 or visit www.oceanfutures.org.

September 9, November 3

24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe sperm, blue, fin, beaked whales, and possibly pilot whales and offshore dolphin species, as well as, late summer and fall pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or e-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

September 15

Coastal Cleanup Day. Join forces with 50,000 Californians and the California Coastal Commission for the 17th Annual Coastal Cleanup Day.

October 13

Friends of the Sea Otter Annual Meeting. 6PM at the Monterey Bay Aquarium.. Visit www.seaotters.org for more information.

Nov. 28-Dec.3

14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconference.org

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American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950

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Soundings

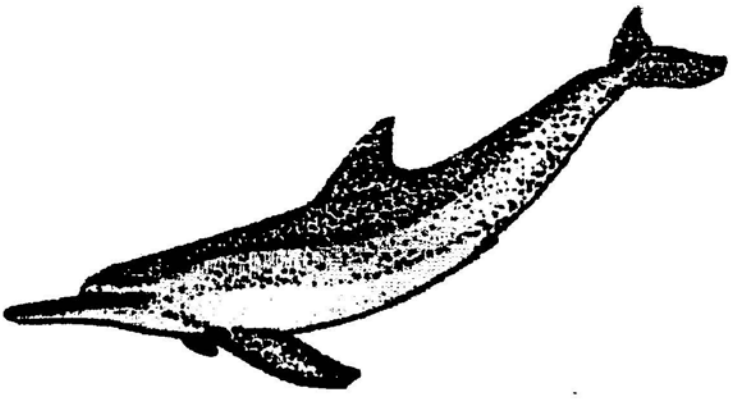
American Cetacean Society ~ Monterey Bay Chapter **August 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)



Date: Thursday, August 30th 2001

Time: 7:30 p.m.

Speaker: Carol Maehr, Docent Administrator, Point Lobos State Reserve

Title: Midway Atoll: Spinner Dolphin research and seabird monitoring

Twelve hundred and fifty miles WNW of Honolulu lies the remote, but easily accessible, coral atoll of Midway. A National Wildlife Refuge administered by the US Fish and Wildlife Service, it harbors a resident population of 200+ Spinner Dolphins, together with Hawaiian Monk Seals and Green Turtles, both endangered. There are also 1 million or more nesting seabirds of 12 species.

Carol Maehr, together with Norma Davis, spent two weeks in May with Oceanic Society Expeditions, first studying the aspects of the ecology, behavior and social organization of the lagoon-inhabiting Spinners and for the second week working on a long-term study of five species of nesting seabirds, focusing on the two albatross species.

Carol is an energetic naturalist/traveler who has talked to us previously on an Earth Watch sponsored Hawaiian Humpback Whale study. Please join us for a most informative and entertaining evening.

ACS MARINE MAMMAL SIGHTINGS 7/30/01

compiled by Richard Ternullo

So starts the Oceanic Season on Monterey Bay and the selection of sightings reflect this by the wide variety of species reported.

Blue and Humpback Whales are seen daily and provide the most consistent opportunity to see both species in North America. Most recent days have yielded up to 30-40 of both in the last 2 weeks Trips offshore have offered beaked whales, a rare but realistic hope for the hard core whale watcher.

Albacore Tuna are present offshore. White Sea Bass inshore have been present in numbers that have not been seen since the 1950's, perhaps indicating another episode of inshore warming. It will be interesting to see if Long-beaked Common Dolphin appear in the next 3-4 weeks.

At any rate, look for odd marine mammal and bird sightings in the near future.

Date	# of animals	Location	Obs
BLUE WHALE			
There are 32 sightings of up to 20+ individuals along canyon edges and offshore.			
FIN WHALE			
7/12	?	42 mi SW Pt. Piños	JW
About 40 total whales in the area including **BLUE** and **HUMPBACK WHALES.**			
HUMPBACK WHALE			
There are 66 sightings of up to 50+ individuals scattered throughout the Bay and surrounding waters.			
MINKE WHALE			
7/7	1	Near Pt. Piños	GF
7/9	1	4 mi SW Pt. Piños	MBW
7/11	1	.5 mi N Pt. Piños	MBW
7/12	1	Off Asilomar Bch.	LO
7/19	1	1 mi N Pt. Piños	MBW
7/22	1	1 mi S Cypress Pt.	MBW
7/26	1+1+1+1	Near Pt. Piños	MBW
7/28	1	.5 mi N Hopkins Marine Station	MBW
SPERM WHALE			
7/12	2	18 mi SSW Pt. Sur	JW
7/25	1	7 mi SW Moss Landing	MBW
KILLER WHALE			
7/9	2	1.5 mi NW Pt. Lobos	MBW

7/11	5	10 mi W Pt. Sur	HN
7/14	5	4 mi SW Moss Landing	MBW
7/19	7	18 mi WSW Santa Cruz	SVS
7/26	4	2 mi W Cypress Pt.	BC
7/28	4	2 mi W Cypress Pt.	BC
BAIRD'S BEAKED WHALE			
7/2	5	6.5 mi NW Pt. Piños	MBW
7/7	15	30 mi ? from Pt. Piños	DL
CUVIER'S BEAKED WHALE			
7/10	3	17 mi SW Pt. Piños	MBW
7/11	5	5 mi WNW Pt. Piños	MBW
RISSO'S DOLPHIN			
7/9	700	4 mi W Pt. Piños	MBW
Associated with 500 **NORTHERN RIGHT WHALE DOLPHIN** and 450 **PACIFIC WHITE-SIDED DOLPHIN.**			
7/10	60	7 mi. W Pt. Piños	MBW
7/11	150	5 mi W Pt. Piños	MBW
7/17	70	4 mi WSW Pt. Piños	MBW
7/17	800	4.5 mi SW Pt. Piños	MBW
Associated with 800 **PACIFIC WHITE-SIDED DOLPHIN** and 600 **NORTHERN RIGHT WHALE DOLPHIN.**			
7/18	12	1.5 mi S Cypress Pt.	DL
7/26	50+	8 mi SSW Santa Cruz	MBW
Associated with some **PACIFIC WHITE-SIDED DOLPHIN.**			
BOTTLENOSE DOLPHIN			
6/15	2	Upcoast from Cement Ship	JA
PACIFIC WHITE-SIDED DOLPHIN			
7/2	100	8 mi S Santa Cruz	MBW
Associated with 300 **RISSO'S DOLPHIN** and 20 **NORTHERN RIGHT WHALE DOLPHIN.**			
7/3	75	12 mi SW Santa Cruz	MBW
7/7	200	1.5 mi SE Cypress Pt.	MBW
Associated with 300 **NORTHERN RIGHT WHALE DOLPHIN.** There were 4 **DALL'S PORPOISE** in same area.			
7/11	800	1 mi N Pt. Lobos	MBW
Associated with 400 **NORTHERN RIGHT WHALE DOLPHIN.**			
7/25	20	4.5 mi NW Pt. Piños	MBW
7/26	10	8.5 mi SSW Santa Cruz	MBW

7/26	100	3.5 mi NW Pt. Piños	DL
7/27	20	8 mi S Santa Cruz	MBW
7/28	300	5 mi NW Pt. Piños	MBW
NORTHERN RIGHT WHALE DOLPHIN			
7/7	300	7 mi ? from Pt. Piños	DL
7/12	400	3.5 mi W Pt. Lobos	MBW
Associated with 600 **PACIFIC WHITE-SIDED DOLPHIN.**			
7/22	500	1.5 mi NW Pt. Lobos	MBW
Associated with 1000 **PACIFIC WHITE-SIDED DOLPHIN.**			
7/26	400	4 mi NW Pt. Piños	MBW
Associated with 100 **PACIFIC WHITE-SIDED DOLPHIN** and 125 **RISSO'S DOLPHIN.**			
DALL'S PORPOISE			
There are 10 sightings along canyon edges throughout the Bay and outer waters.			
HARBOR PORPOISE			
7/5	1	1.5 mi W Moss Landing	MBW
7/6	2	.5 mi N Monterey Harbor	MBW
NORTHERN ELEPHANT SEAL			
7/25	1	.75 mi W Cypress Pt.	MBW
Seen with a large Boccacio Rockfish.			
CALIFORNIA SEA LION			
There are about 500-1000 on Monterey Breakwater.			
PACIFIC HARBOR SEAL			
Seen from Monterey Harbor to Pt. Lobos and in Elkhorn Slough.			
CALIFORNIA (SOUTHERN) SEA OTTER			
Seen from Monterey Harbor to Pt. Lobos and in Elkhorn Slough.			
LEATHERBACK SEA TURTLE			
7/18	1	3 mi SSW Moss landing	GG
7/26	1	8 mi S Santa Cruz	MBW
7/26	1	8.5 mi S Santa Cruz	MBW
7/30	1+1	7.5 mi SW Moss Landing	MBW
7/31	1+1	4 mi SW Moss Landing	MBW

JA, J. Apelt, BC, B. Cutter, GF, G. Fisher, GG, G. Goulart, DL, D. Lemon, LO, L. Oliver, MBW, Monterey Bay Whalewatch, HN, H. Neece, SVS, S. Van Sommeran, JW, J. Williamson

MARINE SCIENCE & CONSERVATION NOTES

Transient Killer Whales off Alaska among Most Contaminated Marine Mammals Ever Measured. PCBs and DDT produced thousands of miles from Alaska continue to accumulate at the top of Alaska's food chain poisoning and killing Alaska's killer whales. These chemicals may now be another factor pushing the genetically unique family of Prince William Sound whales, known as AT1 group, closer to extinction according to whale biologists.

The contaminants found in the well known killer whales that stranded and died last summer were PCBs and DDT, chemicals banned or restricted in the US for decades but still produced in Asia and Third World countries.

Transported across the globe on air and ocean currents, the contaminants infiltrated Alaska's food chain and have been documented at elevated levels in a wide range of animals for years - sea otters, walruses, northern fur seals, peregrine falcons and bald eagles. As the chemicals move up the food chain they concentrate and build in the fatty tissues.

As a result, among 77 killer whales tested in the Gulf of Alaska between 1994 and 1999 the highest levels appeared among animals that eat only marine mammals, the type known as transients. Among 10 killer whales sampled in 1999 and 2000, several transients appear to be among the most contaminated marine mammals ever measured.

The whale that died last July in Hartney Bay - a closely studied harbor seal predator nicknamed Eyck - has concentrated PCBs at about 370 part per million and DDT at about 470 parts per million in its tissues according to chemist Gina Ylitalo of the National Marine Fisheries Service lab in Seattle.

Similar levels found recently in killer whales in the Pacific northwest prompted leading biologist Peter Ross and four others to write in the Marine Pollution Bulletin that killer whales in British Columbia can now be considered the most contaminated cetaceans in the world.

Killer Whale Predation on Sperm Whales. In October 1997 a pod of approximately 35 killer whales attached a pod of sperm whales 130 km W SW of Morro Bay in Central California. One sperm whale was killed and eaten. The rest were perhaps seriously injured or mortally wounded. Other attacks have occurred off the big Sur coastline (5 days later) and another off Acapulco, Mexico in August 1989. Sperm whales were at one time thought to be invincible and immune to killer whale predation. It has now been hypothesized that killer whale predation on sperm whales has been an underrated, selective factor in the evolution of sperm whale ecology, influencing perhaps the development of their complex social behavior and at sea distribution patters. A full detailed scientific abstract and discussion on this story appears in the July 2001 edition of Marine Mammal Science.

Killer Whales Sighted West of Ni'ihou Hawaii. A rare sighting of five killer whales including one juvenile occurred March 20, 2000, during an aerial survey of waters west of the Hawaiian island of Ni'ihau. The sighting occurred 11 miles off Kanelino Bay at 21° 49' N, 160° 20' W. Killer whales are not unknown in Hawaiian waters but the most recent confirmed sighting of record for Hawaiian waters was in 1979.

New Whale Species Identified. For at least three decades people have reported seeing a whale species thought to be native to Arctic or Antarctic waters inexplicably swimming in the equatorial Pacific Ocean. In August 2000, the NMFS confirmed that this mystery was actually a species never before identified. A research crew headed by chief scientist Lise Ballance of NMFS was conducting a dolphin survey 1,000 miles (1,600 km) southeast of Hawaii when it shot video footage of the mysterious Tropical Bottlenose whale. The new species probably hadn't been identified because of its rarity and habitat in a region not frequented by researchers, NMFS scientist said. Scientists need tissue sample from the whale to confirm its identity and to classify it correctly.

Japan Pushing for End of Whaling Ban. Japan and its pro-whaling allies squared off against opponents at the International Whaling Commission meeting where a fight over the 15 year ban on commercial whaling has begun. Japan is pushing for a resumption of commercial whaling which was banned by the IWC in 1986. It has a strong ally in

Norway which resumed its commercial hunt of minke whales in 1993 despite the nonbinding ban. In January it lifted a voluntary ban on exports of whale meat and blubber.

To lift the ban the pro-whaling nations need a three-quarters majority vote and some moratorium supporters have accused Japan of buying the votes of poorer nations with foreign aid. Japan kills about 500 minke whales a year a, a part of a euphemistic "scientific whaling" program allowed by the IWC. The meat from the animals is sold commercially and critics call the hunts a disguise for commercial whaling. In June, Japan announced it planned to start allowing the sale of meat from whales that get tangled in shore nets.

Proposed Pacific and Atlantic Whale Sanctuaries Vote Fails. Efforts at the IWC to create whale sanctuaries in the southern parts of the Atlantic and Pacific Oceans failed as Japan and its pro-whaling allies defeated nations concerned about protecting whales. Japan and Norway and a number of poorer countries including six Carribean nations claim that have more interest in whaling than in protecting whales. Japan has been pushing for an end to the 15 year ban on commercial whaling and advocates of the sanctuaries argued the IWC conference that they would be needed protection for whales should the ban be lifted.

Australia and New Zealand which offered the South Pacific proposal for the second time said it would protect the breeding grounds of 11 great whale species. Most they said have still not recovered from devastating population declines suffered before the commercial whaling ban was imposed in 1986.

Brazil, the main sponsor of the south Atlantic sanctuary proposal said it badly needed to protect 10 whale species in the region, many of them hit hard by commercial whaling. The South Atlantic was a hotbed of "pirate" killing of protected species until the 1970s.

Pro whaling countries - Japan, Norway, Iceland and their allies in the Carribean and other poorer areas said sanctuaries are unnecessary. "No one should be surprised that the sanctuary proposals have failed again", said Minoru Morimoto, the Japanese representative. "They have no scientific basis [and] were not needed for conservation."

Alaska's Otter Populations Depleted. The Seattle Times reported on August 15, that the Center for Biological Diversity filed a petition on August 14 to gain greater federal protection for Alaska's sea otters by having them declared depleted, as the largest population of otters in Alaska has deceased in number by 70% from 1992 to 2000. Such a designation would require Fish & Wildlife to come up with a new conservation plan for the otters under the Marine Mammal Protection Act.

Mexico Establishes Turtle Refuge. 10 fishermen have establishes Baja California's first turtle refuge in Bandeintas Estuary, a quiet protected arm of Magdalena Bay on the Pacific side of the Peninsula. Although the Mexican government outlawed the killing of turtles in 1990, more than 10,000 turtles are killed and eaten every year. Five species of turtles inhabit Baja California waters: green, loggerhead, olive ridley, hawksbill and leatherback. Tourists gather in Magdalena Bay in winter to observe grey whales and their newborn calves. Ecotourist operators and fishermen hope that the tourists will stay an extra day to see turtles. To read more about sea turtles of Baja, log on to www.bajatortugas.org.

Sea Lion Carcasses Found in Galapagos. The bodies of 15 sea lions have been found in Ecuador's Galapagos Islands with their teeth and sexual organs extracted presumably for sale on the Asian black market as aphrodisiacs. The carcasses were discovered after park officials received an anonymous tip that 25 mutilated sea lions had been left on the shores of San Cristobal, the easternmost island on the Pacific Archipelago.

Easy Way to Tell Congress to "Turn Off Low Frequency Acoustic Sonar". The Natural Resources Defense Council (NRDC) and Ocean Futures Society (OFS) have set up a web page at http://www.nrdcaction.org/index.asp?step=2&item=518 to make it easy for you to send electronic messages of protest to your U.S. senators and representatives. Congress is now deciding the Navy's funding for next year -- so tell them to **"Turn Off LFA Sonar"** by cutting off its funding.

CALIFORNIA MARINE SCIENCE & FIELD NOTES

Carrying Capacity for Sea Otters. An estimation for the carrying capacity of sea otters along California coast is approximately 16,000 individuals. Equilibrium densities were determined using the number of sea otters observed during spring surveys in each of the three habitat types otters currently inhabit. The amount of habitat available to sea otters was estimated using a Geographic Information System (GIS) program. The GIS based approach incorporated detailed bathymetric contours, produced repeatable and accurate estimates, and served as an innovative method of measuring sea otter habitat.

Previously Unknown Whale Species Unearthed. A previously unknown species of whale that lived 2-4 million years ago has been found in La Jolla, California. The fossil remains were identified by paleontologists as the remains of an extinct type of baleen whale that swam in a huge bay covering what is now Mount Soledad. The remains of a partial skull, both ear bones, a lower limb bone and broken ribs were excavated from the soil. Lawrence G. Barnes, a vertebrate paleontologist, identified the bones, estimated the length of the whale at about 40 feet. Shark teeth belonging to an ancestor of the great white shark were also found.

Red Abalone Seriously Threatened. Red abalone are now so seriously threatened by poachers and disease the Fish and Game Commission is considering drastically curtailing recreational diving and possibly even banning diving altogether. The latest proposal comes after several years of already intense efforts, including restrictive sport diving rules and a legislative ban on commercial harvesting of all abalone.

California red abalone populations continue to plummet despite rules and legislation in great part because of poachers who persist despite misdemeanor fines that begin at $15,000, Fish and Game check points, sophisticated night scopes and thermal imaging technology, more than 100 arrests and even stiff prison terms.

Poachers Greet Return of Giant Black Sea Bass. Black sea bass were depleted in the 1930s by commercial and recreational fishing. The few that remained were hunted as prize trophies until the state acted in 1982 and made it a misdemeanor to kill the fish. Dozens have reappeared around the Channel Islands this year. Unfortunately so have their chief predators: spear fishing poachers. Sea bass have been seen around Catalina and Anacapa with spears dangling from them. More and more dive shops have discontinued selling spear guns and more and more divers have become content to capture on film what they used to stuff and mount on the wall.

Giant black sea bass range from Humboldt Bay in northern California to Baja California. They can attain a length of 7.5 feet and weight of 563 pounds. They feed mostly on shrimp, lobster, rays and small bottom fish. They congregate around the Channel Islands from April through October to spawn and then disappear each minter. 30 sea bass now congregate on the sandy bottom and in the kelp beds of Santa Catalina Island. Anyone interested in diving with giant black sea bass can contact Steve Medaras at Scuba Luv Dive Shop on Catalina Island.

Epic Congregation of Blue Whales Found off San Miguel Island. Blue whale researcher John Calambokidis discovered between 100 and 200 feeding blue whales 5 miles west of San Miguel Island. It was so thick with blue whales they were running into each other. July 23-26 is when John found the blues at the very end of his summer field work with blue whales in the Channel Islands.

Blue Whales Sightings Explode in Monterey Bay. July 26th was the first big blue whale day in Monterey as 25 blues were seen estimated to be feeding off the Soquel Canyon by the Sea Wolf II. Blue whales have been seen on every whale watch since then, and has thus far culminated with 40 being sighted on August 2 with Monterey Bay Whalewatch on board the Sea Wolf II. August 2 is also very noteworthy because it was the first day we saw surface lunge feeding blue whales. The blues just erupted through the surface of the water foraging on krill. At least 10 surface lunges were witnesses in about 45 minutes. This is the first surface lunge feeding seen in Monterey bay in a few years. The blue whales are spread out between Point Pinos - Cypress Point all the way across the bay to Soquel Canyon. Most of the summer feeding population of blue whales seems to be feeding between Point Piedras Blancas and up to Bodega Bay.

The first significant sightings of blue whales at the Farallons occurred during the weekend of August 4 and 5th when 15 blue whales were seen on both of the Oceanic Society's natural history trips to the Farallons. 200 more blue whales were seen feeding by Todd Chandler and John Calambokidis off Bodega Bay.

Reevaluation of No Otter Zone. A group of about 140 southern sea otters was relocated to San Nicolas Island, about 60 miles off Point Mugu, in the late 1980s. The idea was to set up a reserve population for the otters should an oil spill or other calamity wipe out the otters along the coast.

Urchin divers and other fishermen were furious that the otters had been translocated to such productive fishing grounds. So federal biologists struck a deal with fishermen in 1987 to relocate any otters that moved into any of southern California coastal waters or around any other of the Channel Islands: the "no otter zone".

Fishermen now claim that federal biologists have reneged in that agreement, failing to round up about 152 otters that have been spotted south of the Point Conception in Santa Barbara County.

The US Fish and Wildlife Service announced earlier this year that it would not relocate any otters living in southern California waters until finishing a reevaluation of its relocation program, including its decade old "no otter zone". The zone extends from Point Concepcion to the Mexican Border and includes all the Channel Islands. Only about 20 out of the 140 otters that were translocated now remain at San Nicolas Island. So the US Fish and Wildlife Service is now considering declaring its "translocation program a failure", said Greg Sanders, the Fish & Wildlife Service's southern sea otter coordinator. A final decision is not expected until December 2001.

Gulf of the Farallons National Marine Sanctuary 20th Anniversary Celebration

Farallon Islands: Sentinels of the Golden Gate. Join Peter White as he reveals the history of the Farallon Islands and its inhabitants. He will show slides that documents the cultural and natural history of the elusive islands. Thursday Sept. 6, 2001 7-8:30PM. Bear Valley Visitor Center, Point Reyes. Suggested donation $5. *(continued on next page)*

Monterey Bay Birding Weekend
October 6-7, 2001

The Monterey Bay offers some of the best birding anywhere in the world. Whether you are interested in marine birds, shorebirds, songbirds, or terrestrial birds, this 2 days birding extravaganza offers something for everybody.

2 pelagic trips are being offered into Monterey Bay with Shearwater Journeys: Saturday, October 6, Albacore Grounds - offshore Monterey $125; Sunday, October 7th, Monterey Sea Valley and Sur Canyon, $105. Trips are led by one of the finest seabird naturalists in North America, with 4-14 leaders on each boat. For information call 831-637-8527. As many ACS members know, great opportunities exist to observe cetaceans on the Shearwater Journeys.

Other activities include:
- ➢Early Bird Field Trip
- ➢Elkhorn Ranch Field Trip
- ➢Plumage & Molts at Pacific Grove Natural History Museum
- ➢Raptor Lecture & Field Trip
- ➢Discover the California Condor
- ➢Big Sur Bird Week
- ➢Kayak Trip

Call 831-761-1719 for more information.

Adventures with Blue and Humpback Whales in the Gulf of the Farallons. The waters just outside of the Golden Gate are destination feeding areas for the largest creatures on earth. Join John Calambokidis, whale researcher and principle investigator of Cascadia Research, as he shares his encounters with these giants of the deep that visit the Gulf of the Farallons. Hear what it is like to study these awesome inspiring creatures in the wild. An update will be given on conservation efforts and the threats these creatures are still facing.

Sixth Biennial Workshop on Research in the Gulf of the Farallons. The Gulf of the Farallons National Marine Sanctuary (GFNMS) will be conducting a multi disciplinary workshop on the research with the Gulf of the Farallons. Disciplines include oceanography, geology, marine biology, resource management and protection, ornithology, botany, education, ethology, health and other research assessing the environment within the Gulf and adjacent waters. Educators, researchers and students are invited to present their marine education programs as part of the poster session. Thursday October 25, 2001. 8AM-5PM at the Fire House at Fort Mason Center in San Francisco. For information call Jan Roletto (415) 561-6622.

Whale Watching in the Gulf of the Farallons. Celebrate the Sanctuary's 20th anniversary by being a part of this annual trip. Fall is a great time to see the multitudes of diverse and beautiful creatures flock to the Gulf of the Farallons to feed and breed in the nutrient rich waters. Sightings may include blue and humpback whales, Dall's porpoise, Stellar sea lions, great white sharks, tufted puffins or any of the other 31 species of marine mammals that have been documents in the Gulf. Saturday September 29, 2001. 7:30AM-4:00PM, $70/Oceanic Society members, $80/non-members. Please call Amy Wood (415) 561-6625.

Gulf of the Farallons National Marine Sanctuary 20th Anniversary Festival. At GFNMS Visitor Center at Crissy Field in San Francisco's Presidio, the festival includes a silent auction, childrens' activities, environmental groups' information booths, BBQ, and beer and wine tasting. GFNMS encompasses an area of 948 nautical miles roughly from Bodega Head in the north, out to and around the Farallon Islands to the west, and south to Half Moon Bay. Considered one of the most productive marine ecosystems on the planet, it is home to blue whales, great white sharks, fur seals, salmon, halibut, herring, Dungeness crab, and countless other species. Call GFNMS at (415) 561-6625.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

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☐ Family, $45
☐ Active, $35
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ACS Chapter: #24

CALENDAR

Beginning May 15
Channel Islands Whale Watching. The 88-foot Condor begins its all day whale watching to the Channel Islands on May 15. Santa Barbara offers some of the best whale watching in the world. Blue, Humpback, Fin, Minke Whales, and several species of dolphin are possible, including Orcas. $65/person. Trips depart Santa Barbara Harbor at 8AM and return between 3PM and 5PM. 805-963-3564.

Beginning June 2
Oceanic Society Farallon Islands Natural History & Whale Watch Cruises. Summer whale watching season begins June 2 with weekend and select Friday trips to the Gulf of the Farallons, one of the most biologically productive marine environments on the West Coast. Blue and humpback whales have been abundant in past summers and sightings of various dolphin and porpoise species are common. Call 415-474-3385.

August 25
ACS Monterey Bay Chapter Blue Whale Quest. Leaving at 9AM, from Sam's Sportfishing on Wharf 2, Monterey, aboard the 70 foot SeaWolf II. For more information and reservations call 373-2274. Expert naturalists will be onboard for narration and interpretation. $40 for ACS Members. $50 for non-members.

August 25
Ocean Festival Day 2001. The Pajaro Valley Arts Council. 12noon-4pm. Main Street Place, Watsonville.

September 9, November 3
24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe sperm, blue, fin, beaked whales, and possibly pilot whales and offshore dolphin species, as well as, late summer and fall pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or e-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

September 11
Fall Lecture Series: Ebb and Flow Tales of Marine Research and Conservation. Dr. Wallace J. Nichols: Loggerhead Sea Turtle research and conservation efforts. Seymore Marine Discovery Center, Santa Cruz. 831-459-3800

September 14th
Friends of the Sea Lion 30th Anniversary Fundraiser. 6PM to midnight, Hotel Laguna in Laguna Beach. Silent auction, dinner and dancing. $75/person. Call 949-494-3050.

September 15
Coastal Cleanup Day. Join forces with 50,000 Californians and the California Coastal Commission for the 17th Annual Coastal Cleanup Day.

September 30
Shark and Sanctuary Celebration. 11AM-4PM Santa Cruz Wharf. Call 459-3800.

October 13
Friends of the Sea Otter Annual Meeting. 6PM at the Monterey Bay Aquarium.. Visit www.seaotters.org for more information.

Nov. 28-Dec.
14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconfernce.org

Wake Up With Whales

Join the American Cetacean Society
Blue Whale Quest
August 25, 2001
9:00AM to 3:00PM

Explore Monterey Bay with expert local naturalists. Highlights of this all-day marine mammal cruise last year included sightings of Blue, Orca and Minke whales. We will also see other marine creatures such as dolphins and porpoises, ocean sunfish, otters, sea birds, and possibly even the Leatherback turtle. So come aboard!

TIME: **Board at 8:30 AM.** Depart at 9:00am. Return at 3:00pm.

PLACE: **Sam's Fishing Fleet,** Fisherman's Wharf

COST: $40 for ACS members. $50 for non-members. All proceeds go toward local research and education programs supported by the ACS Monterey Bay Chapter.

RESERVATIONS: Contact Katherine or Sue Whitaker at (831) 373-2274. Make check payable to **ACS,** P.O. Box HE, Pacific Grove, CA 93950

Check Our Website: www.starrsites.com/acsmb/

American Cetacean Society
Monterey Bay Chapter
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Soundings

American Cetacean Society ~ Monterey Bay Chapter **September 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

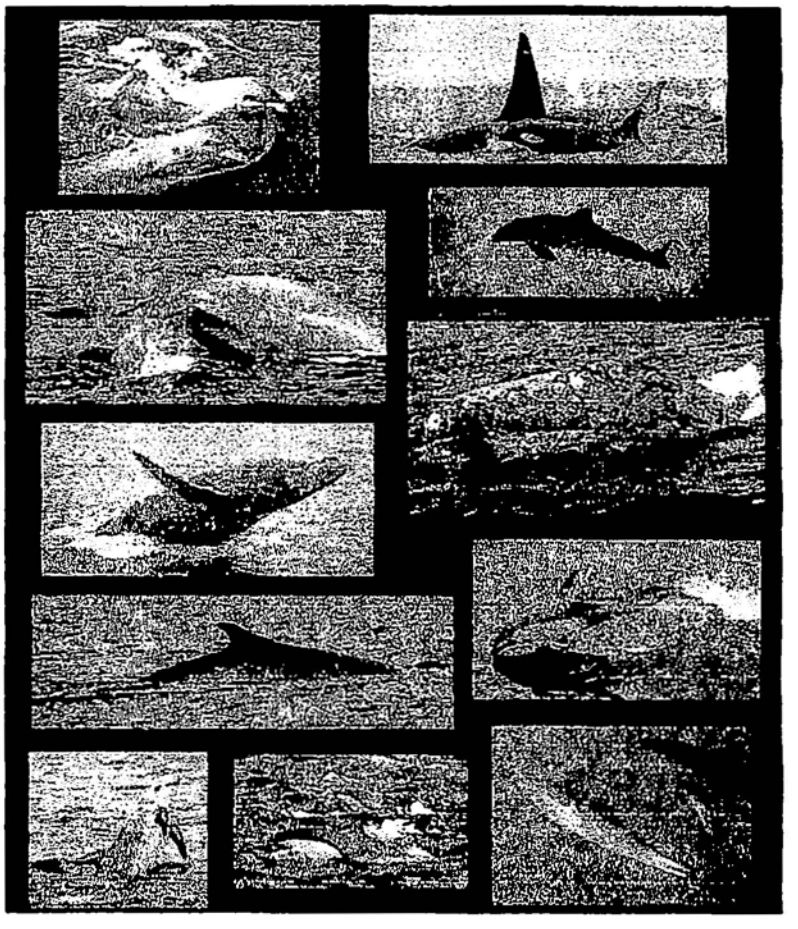
Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)

Date: Thursday, September 27th, 2001
Time: 7:30 p.m.

Speaker: Carol Keiper, Moss Landing Marine Laboratories and the Oceanic Society

Title: Marine mammals off the central California coast: the effects of upwelling and other oceanographic events on their distribution.



The waters off central California, between Bodega Bay and Cypress Point, are well known for the remarkable abundance and diversity of marine mammals. These waters are part of the California Current System (one of six eastern boundary currents on our planet), and, as with other coastal upwelling systems, are characterized by seasonal changes in physical oceanographic climate varying both temporally and spatially. The variability of upwelling, coupled with larger-scale processes such as El Nino and La Nina, affects productivity and the distribution of fish and marine mammals. This study utilized shipboard data, remote sensing and GIS.

Carol has been leading natural history trips off central California (in particular to the Farallon Islands) for the past 15 years and during the last five years has been involved in conducting research for her thesis. During this talk she will highlight some of her results as well as some dramatic predator-prey interactions at the Farallon Islands. The latter includes video of a Killer whale attack on a White shark.

Please join us for a stimulating and highly informed presentation.

(Photo collage originally appeared in June 2000 issue of Soundings.)

SIGHTINGS

ACS 8/31/01
Compiled by Richard Ternullo

Blue and Humpback Whales continue to be frequently seen along canyon edges and offshore feeding on krill. The Blue Whales have been exhibiting a lot of speed swimming or Racing behavior. It is not known why they engage in this behavior, but recent evidence suggests that Blue Whales travel in male/female pairs and the racing is almost always associated with 3 whales. Perhaps the third whale is another male? The Sei Whale sightings and reports of whales meeting the description of Sei Whale are the most ever recorded. In other areas of the world Sei Whales are known to be erratic in their appearances and even described as "invasionary".

There has never been a recording period that contained so many sightings of Sperm Whale. It appears that the sightings are of the same male that has been seen over the past 2 years. Killer Whales have been present frequently and the resighting of a lone male (CA165) over the past 2 months is interesting.

There also seems to some evidence ocean conditions are changing with the appearance of White Sea Bass, a large croaker. Catches of these once very depleted fish have not been seen in these quantities since the middle 1950's.

Date	# of animals	Location	Obs
BLUE WHALE			
There are 63 sightings of up to 20+ individuals throughout the Bay mostly along canyon edges.			
HUMPBACK WHALE			
There are 47 sightings of up to 100 individuals scattered throughout the Bay and lower coast, mostly along canyon edges. There is also 1 record of feeding using a J net on surface krill swarms.			
FIN WHALE			
8/17	7-8	15mi SW Pt. Sur	DF
SEI WHALE			
8/12	5-6	35 mi SW Pt. Pinos	DL
There have been several reports of unusual baleanopterides offshore that seem to satisfy a tentative ID of Sei Whale. This observation was prolonged and carefully scrutinized with Sei Whale as a probable correct ID.			

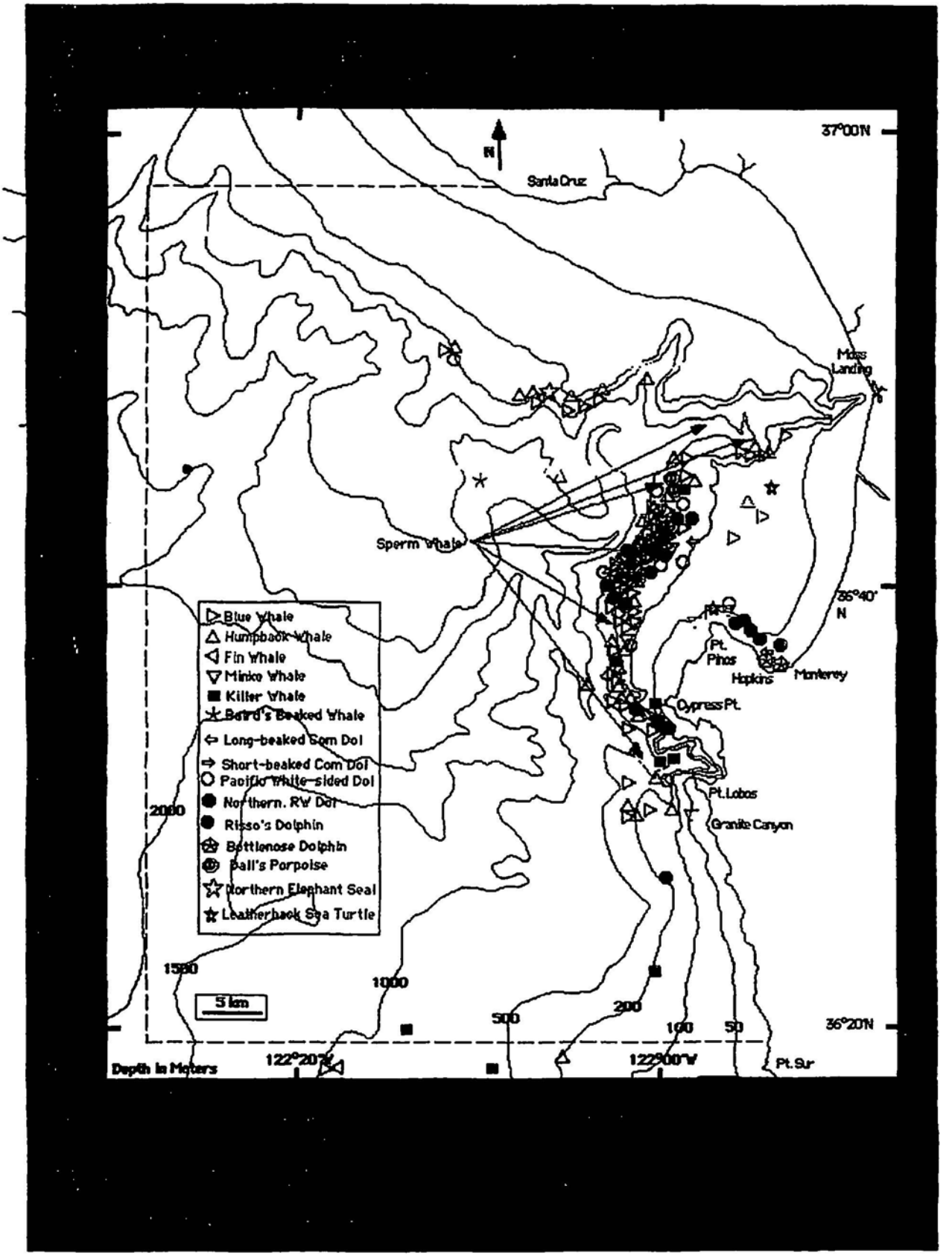
MINKE WHALE			
8/1	1	1 mi NW Hopkins Marine Station	MBW
8/4	1	.5 mi N Otter Pt.	MBW
8/5	1	Off Yankee Pt	DF
8/10	1	1 mi SW Pt. Pinos	DF
8/22	1	Near Cypress Pt.	RS
8/22	1	25 mi SW Pt. Pinos	NB
SPERM WHALE			
8/1	1	5 mi SW Moss Landing	MBW
8/16	1	7 mi NW Pt. Pinos	LO
8/22	1	4 mi WSW Pt. Pinos	NB
8/23	1	6 mi W Moss landing	MBW
8/25	1	WNW Pt. Lobos	JW
8/26	1	4.5 mi NW Pt. Pinos	DtW
BAIRD'S BEAKED WHALE			
8/26	5-6	16 mi SW Santa Cruz	HN
KILLER WHALE			
8/5	3-4	10 mi SW Pt. Sur	JW
Took 6-8 Albacore Tuna from fishing lines. This is a probable first record of this behavior for this (or any other?) area.			
8/10	1	2 mi S Pt. Lobos	NL
8/12	7	20 mi SSW Pt. Pinos	NL
8/16	1	5 mi NW Pt. Pinos	LO
CA165			
8/17	3	At Cypress Pt. Buoy	DF
8/18	3+1	2 mi S Cypress Pt.	MBW
8/21	5	Carmel Bay	JA
Chasing several **COMMON MURRES** and appeared to eat at least one bird. 3 **BLUE WHALES** flee rapidly to SW.			
8/22	1	.5 mi N Cypress Pt. Buoy	RS
8/25	1	4.5 mi SW Pt. Pinos	CET
CA165			

		BOTTLENOSE DOLPHIN	
8/24	5-8	Near Plaza Hotel	MBW
8/29	9+3	Off Del Monte Beach	DtW
		RISSO'S DOLPHIN	
8/7	20	1 mi N Pt. Pinos	LO
8/7	20	4.5 mi NW Pt. Pinos	MBW
8/8	15	5 mi NW Pt. Pinos	MBW
8/10	1000	Near Soberanes Rocks	HN
8/12	100+	1.0 mi W Tioga Ave	RO
8/16	50	1 mi S Cypress Pt.	DF
8/17	120	2 mi W Cypress Pt.	MBW
Associated with 20 **NORTHERN RIGHT WHALE DOLPHIN** and 40 **PACIFIC WHITE-SIDED DOLPHIN.**			
8/21	100	.5mi N Otter Pt.	MBW
8/22	75-100	1 mi N Pt. Pinos Lighthouse	LO
8/23	100	4.5 mi NW Pt. Pinos	LO
		PACIFIC WHITE-SIDED DOLPHIN	
8/1	?	1-2 mi W Pt. Lobos	WW
8/1	100	4.5 mi W Pt. Pinos	MBW
8/4	100	5 mi SW Pt. Pinos	MBW
Associated with 20 **HUMPBACK WHALES** and 4 **BLUE WHALES.**			
8/10	1100	4.5 mi W Pt. Pinos	MBW
Associated with 20 **NORTHERN RIGHT WHALE DOLPHIN.**			
8/11	300	4.5 mi W Pt. Pinos	MBW
Associated with 20 **HUMPBACK WHALES** and 30 **BLUE WHALES.**			
8/16	250	5 mi NW Pt. Pinos	MBW
8/18	200	5 mi NW Pt. Pinos	MBW
Associated with 4 **HUMPBACK WHALES** and 7 **BLUE WHALES.**			
8/23	150	4 mi W Pt. Pinos	MBW
		NORTHERN RIGHT WHALE DOLPHIN	
8/4	300	22 mi SSW Pt. Pinos	DF

LONG-BEAKED COMMON DOLPHIN			
8/20	4-500	Off Plaza Hotel	MBW
8/31	7-8	4.5 mi NW Pt. Pinos	DtW
DALL'S PORPOISE			
8/1	3-4	7 mi SW Moss Landing	MBW
8/28	6	4 mi W Pt. Pinos	LO
NORTHERN ELEPHANT SEAL			
8/1	1	5 mi NW Pt. Pinos	MBW
8/23	1	7.5 mi NW P. Pinos	MBW
8/31	1+1	8 mi NW Pt. Pinos	DtW
LEATHERBACK SEA TURTLE			
8/1	1	6.5 mi SW Moss Landing	MBW
8/14	1	Near Pt. Pinos Buoy	NL

JA, J. Aliotti, NB, N. Black, CET, Cheeseman's Ecology Tours, DtW, Discover the World, DF, D. Frank, DL, D. Lemon, NL, N. Lemon, MBW, Monterey Bay Whale Watch, HN, H. Neece, RO, R. Ortiz, LO, L. Oliver, RS, R. Smith, JW, J. Wetle, WW, W. Williamson

Condolences to the families and friends of those who were lost in the September 11, 2001, attack in New York, Washington D.C. and Pennsylvania. The prayers and thoughts of ACS Monterey Bay are with you.


37°00'N
N
Santa Cruz
Moss Landing
Sperm Whale
36°40' N
Pt. Pinos
Hopkins
Monterey
Cypress Pt.
Pt. Lobos
Granite Canyon
36°20'N
Pt. Sur
Blue Whale
Humpback Whale
Fin Whale
Minke Whale
Killer Whale
Baird's Beaked Whale
Long-beaked Com Dol
Short-beaked Com Dol
Pacific White-sided Dol
Northern. RW Dol
Risso's Dolphin
Bottlenose Dolphin
Dall's Porpoise
Northern Elephant Seal
Leatherback Sea Turtle
2000
1500
1000
500
200
100
50
5 km
Depth in Meters
122°20'W
122°00'W

LOCAL WHALE WATCHING

MONTEREY BAY WHALEWATCH
ONE 4-6 HOUR TRIP DAILY.
9AM - 2:30PM
CALL 831-375-4658 FOR INFORMATION AND RESERVATIONS.

MONTEREY SPORT FISHING & CRUISE
TWO 3 HOURS TRIPS DAILY.
10AM-1PM & 1PM-4PM.
CALL 831-372-2203 FOR INFORMATION AND RESERVATIONS.

Monterey Bay Birding Weekend
October 6-7, 2001

The Monterey Bay offers some of the best birding anywhere in the world. Whether you are interested in marine birds, shorebirds, songbirds, or terrestrial birds, this 2 days birding extravaganza offers something for everybody.

2 pelagic trips are being offered into Monterey Bay with Shearwater Journeys: Saturday, October 6, Albacore Grounds - offshore Monterey $125; Sunday, October 7th, Monterey Sea Valley and Sur Canyon, $105. Trips are led by one of the finest seabird naturalists in North America, with 4-14 leaders on each boat. For information call 831-637-8527. As many ACS members know, great opportunities exist to observe cetaceans on the Shearwater Journeys. Call 831-761-1719 for more information.

Other activities include:
- ➢Early Bird Field Trip
- ➢Elkhorn Ranch Field Trip
- ➢Plumage & Molts at Pacific Grove Natural History Museum
- ➢Raptor Lecture & Field Trip
- ➢Discover the California Condor
- ➢Big Sur Bird Week
- ➢Kayak Trip

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

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Make checks payable to: **ACS/Monterey Bay Chapter**
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P.O. Box HE, Pacific Grove CA 93950

ACS Chapter: #24

Calendar

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Soundings

American Cetacean Society ~ Monterey Bay Chapter **October 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

(Across from the American Tin Cannery Outlet Stores)

Date: Thursday, October 25th 2001

Time: 7:30 p.m.

Speaker: John Calambokidis, Cascadia Research, Olympia, WA

Title: Tracking Blue and Humpback Whales off California and in the North Pacific.

We are fortunate to be witnessing the recovery and return to California coastal waters of Blue and Humpback whales. The greater Monterey Bay area is one of the preferred "hot spots" for their summer/fall feeding migrations. Our speaker and his collaborators has been in the forefront of studying these rebuilding populations for well over a decade.

He will be discussing his recent research on these whales in the North Pacifc. This will include the individual photo-identification work and the new information it has provided on the population size and trends for both species, as well as new insights into their migrations and foraging patterns. He will also be showing results and some of the video from his recent collaborative work with National Geographic which involved attaching (with a suction cup) Crittercam instrument packages on Blue whales. This has provided data and images on their underwtaer behavior.

Please join us for a special look at at these fascinating mammals.

From the Editor... Tony Lorenz

ACS Monterey Bay Chapter Blue Whale Quest Enjoys Serendipitous Day

On August 25, 2001, ACSMB embarked on its annual blue whale quest in hopes of finding the magnificent blue whales feeding in traditional Monterey Bay foraging areas. We boarded the 70 foot Sea Wolf II captained by expert cetacean and seabird naturalist Richard Ternullo and accompanied by marine biologist and killer whale expert Nancy Black.

Our trip departed from Sam's Fishing Fleet at 9:00AM and within 45 minutes we had our first blue whale sightings. For some on board this was their first look at the majestic blue whale. Our sighting of the first group of whales produced 4 individuals who we recognized as blue whales who have been foraging in Monterey Bay during the summer. We found at least 4 more groups of blue whales further to the northwest and got phenomenal up close looks at the largest animal that has ever lived, including some amazing looks at blue whale flukes. For those on board who had never seen a blue whale before, this was a truly special encounter since it is estimated that only 10-15% of blue whales show their flukes.

By 11:45 we had observed 18 blue whales and heard of more to the northwest, but at the same time we received a report of a male killer whale that had been patrolling the same waters where we had our first looks at blue whales. So we meandered back several miles and located the killer whale which was immediately identified by Nancy Black based on her photo identification work. This same killer whale had been seen several times during the last 5 weeks at different locations around Monterey Bay. We had phenomenal looks at the killer whale and at times he paralleled the boat very closely giving everybody on board intimate looks at the killer whale.

What a way to conclude the 2001 blue whale quest with awesome looks at the oceans top predator and one of the world's most remarkable creatures: the killer whale. In addition to 18 blue whales and the killer whale we also saw one northern elephant seal, three Mola Mola, two blue sharks, three different species of jellies and a plethora of bird species, including Black Footed albatross, Bullers shearwater and both Pomarine and Parasitic jaegers.

We would like to thank Sam's Sportfishing for giving ACS the Sea Wolf II at a greatly reduced rate and also all the naturalists including Katherine Whitaker and Jud Vandervere who did a superlative job disseminating information about the natural history of Monterey Bay, and special thanks to Captain Richard Ternullo and Nancy Black for no only finding the whales and expertly narrating the trip but also giving their time so we could all enjoy such a great day on the ocean.

Cooperative Foraging

by Esta Lee Albright

Many of the Odontocetes, the toothed cetaceans, have an admirable accomplishment in cooperation. They help each other get food. Using their echolocation, squeals and whistles, they orchestrate a rounding up of schools of prey, such as fish. Watching the depth sounder on the whale watch boat, Star of Monterey, we have seen signs that dolphins dive to a school of fish 100 feet down, break off bits of it, herd the new group to the surface, and partake in turn. Once the prey has been gathered, it evidently is easy for individuals to take turns dashing through the concentrated school, grasp a fish between the teeth, and swallow it whole.

Sometimes we see humpback whales joining in. Perhaps the sounds of dolphin communication come to the whale. Mysticetes, such as humpbacks, seem to have no echolocation ability, and we see few signs of varied, cooperative group feeding among humpbacks here in Monterey. We wonder if the humpbacks take advantage of the dolphins' locating and gathering prey items that are of interest to foraging humpbacks, too. However, we have seen curtains of bubbles that we assume have been set by humpbacks in such situations, both from the Sea Wolf and Pt. Sur Clipper whale watch boats. This wall of bubbles has its own use for corralling prey, because evidently fish don't cross the bubble curtain.

Another marine mammal that joins the feeding frenzy is the California sea lion. Young sea lions are seen often in the company of the oceanic dolphins and we assume both species are interested in a dinner of fish. The sea lions, however, have their own group norms, and one is to jump right in the middle of a closely-packed school of fish. Whereas the dolphins take turns, the sea lions are a free-for-all, and the school is soon scattered. The cooperative foraging skills of the dolphins are repeated again and again.

There is a cooperative foraging effort in ACS. At the end of the meeting, refreshments are served and people gather to corral information, grasp some ACS coordination, share greetings, and feed on what's been provided by other members. Are you a dolphin or a sea lion — do you cooperate in the feeding by bringing the food and drink sometimes? Nothing fancy: just plain ordinary prey items that give us a chance to meet and communicate after the meeting. ACS furnishes the cups and napkins. I'm going to be a dolphin next March. Contact Sheila Baldridge, 372-3809, to get on the schedule. There's a big chance for you to be a dolphin in the coming months, too, and I'll look forward to selecting out the prey items you bring.

Esta Lee Albright estalee@inreach.com
Monterey County, California

"There is nothing -- absolutely nothing --
half so much worth doing
as simply messing about in boats."
-- The Wind in the Willows

Nov. 11 - 16, 2001 **"Blubber and Fur: The Whales, Seals and Otters of the Big Sur Coast", Elderhostel : Big Sur Natural History Association, Principal speaker: Esta Lee Albright, Email: estalee@inreach.com Also, Jeff Norman will present Big Sur history, flora, and Native American lifeways. Magnus Toren will talk about the life and times of Henry Miller. There will be a visit to Pt. Sur Light Station. The Ventana Wilderness Society will give a program about California Condors. Jeff Norman and Jud Vandevere will lead native plant walks near Big Sur Lodge, a field trip to Ventana Wilderness Society and a walk at Andrew Molera State Park. Lodging at Big Sur Lodge 5 nights, meals, activities, programs included. $606. Daytime only participation also possible. Register by phone or online. See http://www.elderhostel.org This program and others for Winter 2002 are announced in the elderhostel catalog at the above web site.**

List of Most Recent Marine Mammal Sightings in the Monterey Bay Region

September 1-30, 2001

compiled by Monterey Bay Whale Watch

Date	#	Type of Animal(s)
9/30	2	Humpback Whales
	9	Blue Whales
	350	Pacific White Sided Dolphins
	500	Long-beaked Common Dolphins
9/29	12	Blue Whales
	500	Pacific White Sided Dolphins
	1200	Long-beaked Common Dolphins
	30	Risso's Dolphins
	300	Northern Right Whale Dolphins
9/28	1	Humpback Whale
	3	Blue Whales
	400	Long-beaked Common Dolphins
	300	Risso's Dolphins
	150	Northern Right Whale Dolphins
9/27	2	Humpback Whales
	40	Pacific White Sided Dolphins
	1000	Long-beaked Common Dolphins
9/26	2	Blue Whales
	300	Long-beaked Common Dolphins
9/25	3	Blue Whales
	15	Risso's Dolphins
9/24	2	Humpback Whales
	30	Long-beaked Common Dolphins

	20	Dall's Porpoise
9/23	3	Killer Whales
	200	Long-beaked Common Dolphins
	50	Risso's Dolphins
	1	Harbor Porpoise
9/22	100	Long-beaked Common Dolphins
	12	Risso's Dolphins
9/21	8	Blue Whales
	10	Pacific White Sided Dolphins
	10	Long-beaked Common Dolphins
	44	Risso's Dolphins
	2	Northern Elephant Seals
9/20	6	Blue Whales
	5	Long-beaked Common Dolphins
	414	Risso's Dolphins
9/19	2	Blue Whales
	200	Pacific White Sided Dolphins
	1200	Long-beaked Common Dolphins
	4	Northern Right Whale Dolphins
	2	Harbor Seals
9/18	3	Killer Whales
	40	Pacific White Sided Dolphins
	3000	Long-beaked Common Dolphins
9/17	2	Humpback Whales
	7	Blue Whales
	30	Pacific White Sided Dolphins
	2000	Long-beaked Common Dolphins
	5	Dall's Porpoise

9/16	5	Blue Whales
	300	Pacific White Sided Dolphins
9/15	4	Blue Whales
	400	Pacific White Sided Dolphins
	5	Dall's Porpoise
9/14	2	Blue Whales
9/13	6	Blue Whales
	75	Pacific White Sided Dolphins
	800	Risso's Dolphins
	150	Northern Right Whale Dolphins
9/12	1	Humpback Whale
	30	Pacific White Sided Dolphins
	1	Northern Fur Seal
9/11	5	Humpback Whales
	850	Pacific White Sided Dolphins
	150	Risso's Dolphins
	2	Dall's Porpoise
	20	Harbor Porpoise
	2	Northern Fur Seals
9/10	5	Blue Whales
	4	Killer Whales
	4	Pacific White Sided Dolphins
	30	Risso's Dolphins
	18	Northern Right Whale Dolphins
9/9	2	Humpback Whales
	7	Blue Whales
	400	Pacific White Sided Dolphins

	700	Risso's Dolphins
	600	Northern Right Whale Dolphins
9/8	5	Blue Whales
	76	Pacific White Sided Dolphins
	250	Common Dolphins
	35	Risso's Dolphins
9/6	10	Blue Whales
	5	Killer Whales
9/5	12	Blue Whales
	200	Pacific White Sided Dolphins
	100	Northern Right Whale Dolphins
9/4	7	Blue Whales
	6	Dall's Porpoise
9/3	12	Blue Whales
9/2	6	Humpback Whales
	7	Killer Whales
	40	Risso's Dolphins
9/1	10	Humpback Whales
	8	Blue Whales
	10	Pacific White Sided Dolphins
	18	Risso's Dolphins

Around the Bay

Sei Whale Sighting off Point Sur Area

Rarely seen sei whales have been observed on several albacore fishing trips this summer and early fall. Sei whales are normally found widely but sparsely distributed between Point Piedras Blancas, CA, and to the vicinity of the Revillagigedo Islands, 600 Km south of Baja California. Sei whales are normally found alone or in groups of 2-5 individuals, the larger feeding aggregations are not unusual. Sei whales are among the fastest of the *Balaenopterids* attaining bursts of speed to over 20 knots. Average length of females is 13 meters (43 feet), slightly more than males; average weight is 12-15 metric tons. Maximum length is 18.3 meters (60 feet). Color and shape of the sei whale is similar to the blue whale, but smaller, with a dorsal fin both actually and proportionately much taller. The first report of sei whales in Monterey County this year was by Captain David Lemon while tuna fishing on the Star of Monterey. Other reports include at least one, and possibly three by this observer on September 23, 2001, southwest of Point Sur.

Personal Water Craft Banned in Gulf of the Farallones

The largest Personal Water Craft (PWC or jet ski) free zone was established on October 10th. New federal rules were established in early September that prohibit the use of PWCs such as Jet Skis, Sea Doos and Wave Runners across nearly 950 square miles in the Gulf of the Farallones National Marine Sanctuary. Tests have shown that PWC engines are among the worst polluters of water and air according to the California Area Resources Control Board, and their riders have the highest accident rate of all boaters according to the Department of Boating and Waterways. PWCs are banned in Monterey Bay and areas within 1200 feet of the shoreline of San Francisco, in the surfzone along the city of Pacifica and along much of the Mendocino County Coast.

Electronic Tags Reveal Stock Boundaries Ignored by Bluefin Tuna

Blue fin tuna, one of the most sought after fish in the world, migrate thousands of miles across the Atlantic, according to a new study by Stanford biologist Barbara A. Block and a team of marine scientists.

Using electronic tags placed on wild tuna, Block and her fellow researchers, discovered that some Western Atlantic bluefin tuna mingle with their counterparts from the Eastern Mediterranean -- a finding that could have a profound impact on the international efforts to conserve the magnificent animal, whose numbers have sharply declined as a result of intense commercial fishing in recent decades.

The researchers reported the first descriptions of what they believe to be breeding behavior in giant tunas. Most surprising is that the spawning period occupies a short interval in the yearly activities -- less than one month. A unique behavioral repertoire recorded by the electronic tags suggest that the giant tunas breed at night in very warm waters, swimming up and down the water column for hours.

Bluefin are highly prized, particularly in Japan as sashimi and sushi. A 444 pound bluefin recently sold at a Japanese auction for $175,000!

Rockfish Ban Set

The California Department of Fish and Game has closed offshore rockfish and lingcod fisheries south of Cape Mendocino to recreational fishermen. The emergency action came Friday, October 5, after recommendations from the DFG found that rockfish species were being over fished. The closure limits fishing deeper than 120 feet; near shore fishing is still permitted. The ban goes into effect on October 29 and goes through the end of the year.

Marine Mammal Science & Conservation Notes

Extraordinary Whale Fossil Found: Palaeontologists Unearth Fossils of What They Believe is the Direct Land Based Ancestor of Cetaceans

Two independent studies published in mid September by palaeontologists describe newly discovered fossil skeletons indicating whales are most closely related to the group of plant eating animals that include sheep, pigs, camels, cows, giraffes and hippos -- the cloven hoofed ungulates known as artiodactyls.

One set of fossils unearthed by a group led by J.G.M.. "Hans" Thewissen, as associate professor of anatomy at Northeastern Ohio University College of Medicine, were *pakicetids* 50 million years old fully terrestrial whales. The other set of fossils include the relatively complete skeletons of two 47 million year old amphibious whales called *protocetids*, was dug up by a group led by Philip D. Gingerich, a professor of paleontology at the University of Michigan and several scientists from the Geological Survey of Pakistan.

Both samples were found in the low hills of northern Pakistan in hard rocks that underlie what was once the warm shallows of the Tethys Sea. The sea is thought to be a place where whales evolved from land animals 50 million years ago.

The fossils discovered by Thewissen superbly document the link between modern whales and their land based forebearers and should take their place among other famous intermediates such as the most primitive bird, *archaeopteryx*, and the early hominid, Australopithecus, according to Christian de Muizon, an expert on whale fossils and research director of the National Center for Scientific Research in Paris, who reviewed Thewissen's work.

Four of the skeletons had hands and feet, the ankle bones had the trademark double pulleys. They looked like bones from artiodactyls. And they were found with skulls that had ear bones known to be found in whales said Philip D. Gingerich.

Western Pacific Gray Whale Update

Seismic Surveys for oil off Sakhahn Island in the Russian Far East are pushing endangered western Pacific gray whales from their feeding grounds, the World Wildlife Fund charged on September 13th, calling for Russia to stop the tests.

The WWF said its study carried out between June and August by Russian and American scientists was presented to the Natural Resources Ministry last week. It charges that seismic surveys by oil giant Exxon have forced Western Pacific gray whales to feed in areas where there is less or lower quality food.

The whale population is believed to be less than 100, and they feed annually from June to November off the northeastern coast of Sakhalin, about 62 miles northeast of Japan's Hokkaido Island. The Russian scientists found that the whales shifted locations at te same time as the start of an Exxon survey, the group said. WWF urged Russia to review the process of granting prospective rights amid claims that Exxon took unfair advantage of the loopholes in Russian environmental legislation.

Latest Japanese Whaling Expedition Nets 158 Whales

Japanese ships have returned from an expedition in the Northwest Pacific with a killing of 158 whales, 70 more than last years hunt. They've also added Bryde's and sperm whales to the usual catch of minke, the government reported in August.

The decision last year to include Bryde's and sperm whales in the hunt for the first time triggered criticism worldwide and brought threats of economic sanctions from Washington.

Tokyo claims that with 22,000 Bryde's whales and 102,000 sperm whales in the northwest pacific, the hunt poses no threat to whale populations. But biologists, environmentalists and critics say the purported research program is merely a front for commercial whaling.

The whaling fleet caught 100 minkes, 50 Bryde's

whales, and 8 sperm whales, the agency said. Japan is allowed to catch a limited number of whales under a scientific research program sanctioned by the International Whaling Commission. Japan defends the program as a necessary means of monitoring whale migration, population and feeding habits.

Navy is Sued for Coastal Sonar Tests

The Natural Resources Defense Council, the Humane Society, Defenders of Wildlife and Santa Monica Bay Keepers sued the US Navy on Monday September 10, 2001, claiming it had failed to perform mandatory environmental reviews of its sonar tests in coastal waters, despite evidence that such intense noise can harm cetaceans and other wildlife.

The environmental groups have grown increasingly alarmed since the Navy acknowledged that one type of sonar was "highly likely" to be connected with mass strandings of beaked whales in the Bahamas last year.

The navy has cancelled the next planned test scheduled for October 30 off the Southern California coast, the Los Angeles Times reported. If the environmentalist groups can confirm that the test was cancelled then they say they will not move ahead with the separate legal action to halt the testing. But the lawsuit will move forward challenging the lack of environmental review for the entire program, which has tested sonar at a dozen locations in the Atlantic and Pacific oceans since 1996, said Joel Reynolds, a senior attorney for the Natural Resources Defense Council.

In the suit, environmentalists allege that the Navy has never done a required environmental impact statement on the sonar tests. Nor has the service obtained permits required by the Marine Mammal Protection Act for harassment, injuries or fatalities to cetaceans or other protected marine mammals.

In previous tests, the Navy has experimented with 20 or more sonar systems, including deploying the same mid frequency radar that is suspected in the mass strandings of beaked whales in the Bahamas in March of 2000.

Necropsies showed that five whales died from hemorrhaging around the brain and ear bones -- presumably from intense internal vibrations caused by bursts of mid-frequency sound waves.

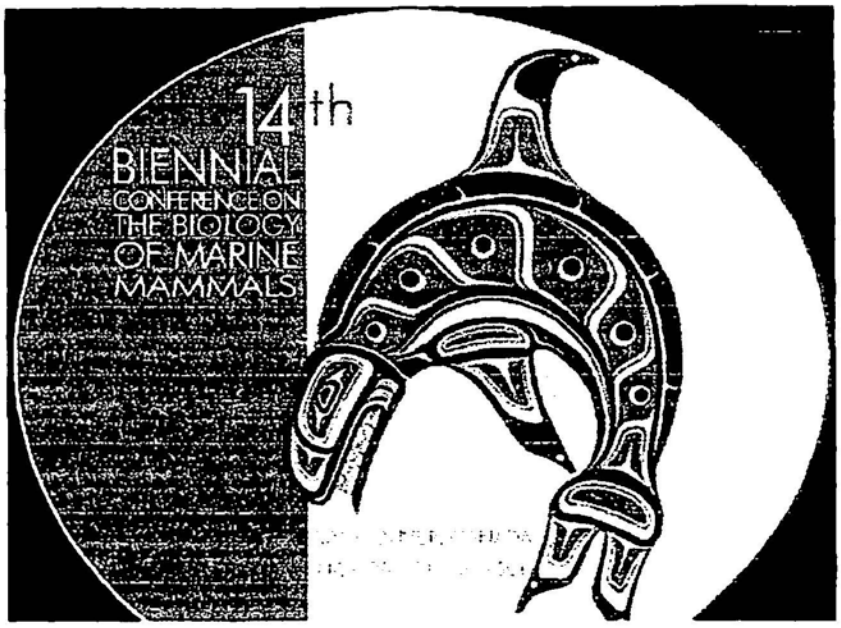
Harp Seal Hunt a "Year-round Slaughter" Says Welfare Organisation

The organisation International Fund for Animal Welfare (IFAW) issued a press release on 16 July pointing out that although the Canadian commercial harp seal (*Phoca groenlandica*) hunt had just ended two days beforehand, the hunt was continuing in Greenland. It is estimated that about 210,000 harp seals were killed in the Canadian hunt, which lasts between 15 November and 15 May, or until the quota can be reached. An estimated 100,000 harp seals were killed last year in Greenland, where the essentially unregulated hunt lasts between June and November. IFAW's Rebecca Aldworth said "This has become a year-round slaughter. The population is under constant threat of hunting, except for a few short weeks when the pups are first born". For more information, contact IFAW at canadasealhunt@ifaw.org or visit http://www.canadasealhunt.ca. (Sources: IFAW - 16 Jul *2001*) (3 September 2001)

Historic Overfishing Led to Today's Oceans Problems, Study Says

Drawing on paleoecological, archaeological and historical data from four continents, a team of researchers convened at the National Center for Ecological Analysis and Synthesis (NCEAS) in Santa Barbara, California, USA, has found that overfishing and hunting through the ages is the cause of many of the problems facing coastal ecosystems today. The scientists linked the ecological extinctions of marine fauna, including marine mammals, to overfishing at a global scale never before realised. Excessive hunting of marine mammals, turtles and fish beginning thousands of years ago, they found, upset delicate webs of life, unleashing population explosions of opportunist species and lethal epidemics against less fortunate ones. The study appeared in the 27 July issue of Science (vol. 293, p629). (Sources: ABC - 27 Jul 2001; BBC - 27 Jul 2001; CNN - 26 Jul 2001; ENN - 27 Jul, 10 Aug 2001; London Times - 27 Jul 2001; New Scientist - 4 Aug 2001; San Francisco Chronicle - 26 Jul *2001*) (3 September 2001)

The following is reprinted with permission. For more information and to register online, visit the website at **http://www.smmconference.org/index.html**



Program

The conference program will comprise five days of presentations, meetings and other events, from 29 November to 3 December 2001 (Thursday through Monday). The program will include spoken and poster presentations, special symposia, student and presentation awards and special evening events. There will be triple concurrent sessions to allow as many spoken presentations as possible. There will also be time scheduled exclusively for poster presentations, and sufficient space will be available for posters to remain displayed throughout the conference.

For tips on how to deliver effective presentations, visit Virginia Commonwealth University's resource page for technical and professional writing.

More program information is coming soon.

Workshops

There will be a number of workshops held at this year's conference. Workshops are not organized and convened by the Conference Committee, but by their respective proponents. **If you are interested in attending any of the workshops to be held at the 14th Biennial, please contact the workshop organizers directly for more information.**

Do you have an idea for a workshop topic that you don't see here? Begin thinking about submitting it as a workshop proposal for the 15th Biennial in Greensboro, North Carolina.

International Sirenian Conservation
This workshop will address current management and research issues, with specific emphasis on the international efforts. Topics could include human threats, conservation, status, and rescue / rehabilitation. Anyone interested in presenting at this workshop should contact the organizer.

Date: Wednesday, November 28
Organizer: Nicole Adimey (Nicole_Adimey@fws.gov)

Viewing Marine Mammals in the Wild: A workshop to discuss responsible guidelines and regulations for minimizing disturbance.
With a continuing increase in marine mammal viewing opportunities, biologists and managers are concerned that closely approaching, petting, teasing, feeding, swimming-with wild marine mammals, or visiting sensitive habitat areas can result in harassment or injury to marine mammals. This workshop will bring together marine mammal experts from the scientific research community, government wildlife agencies, and commercial ecotourism industry to discuss current biological information about wildlife disturbance, appropriate marine mammal viewing guidelines, and various laws in place world wide to protect marine mammals from disturbance with a focus on killer whales, humpback whales and pinnipeds in the Pacific Northwest and Alaska. For more information on this workshop, please visit its website.

Date: Wednesday, November 28

Organizers: Trevor Spradlin (trevor.spradlin@noaa.gov), Gene Nitta (gene.nitta@noaa.gov), Jill Lewandowski, Lynne Barre, Kaja Brix, Brent Norberg.

Marine Mammal Major Histocompatibility Complex Workshop
The MHC workshop will provide an opportunity for scientists, biologists and other interested folk to listen, learn, and discuss current issues in marine mammal immunogenetics. The proposed format will be a combination of short, informal research papers, interspersed with discussions on current topics in various aspects of MHC biology. The organizers are in the process of inviting one or two leaders in human MHC research to provide keynote presentations. Anyone who knows what the abbreviation "MHC" stands for is invited to attend!

Date: Wednesday, November 28
Organizer: Brian Aldridge (bmaldridge@ucdavis.edu).

Biology and Conservation of Beaked Whales
This workshop will act as a platform for presenting current research on beaked whale research, discussion of techniques and methodologies for studying beaked whales and of conservation issues relating to beaked whales. The workshop will be open to anyone who is actively involved in beaked whale research or conservation, or who is intending to get involved in such activities.

Date: Wednesday, November 28
Organizers: Colin MacLeod (macleod_c@colloquium.co.uk), Andrew Williams, Peter Tyack.

The Use of Geomatic Technologies for Marine Mammal Scientists
In this workshop we will explore the potential for using geomatic technologies in marine mammal research. Through presentations, posters, panel discussions, and specialty discussion groups, we will investigate the use of remotely sensed images and GIS mapping procedures as tools to simulate and visualize relationships between marine mammals and abiotic/biotic ecosystem parameters. Abstracts are being accepted for posters and presentations.

Date: Wednesday, November 28
Organizers: Ellen Hines (ehines@office.geog.uvic.ca), Dave Duffus, Maycira Costa, Sue Moore, Marilyn Dahlheim, Ed Gregr, Caterina D'Agrosa, Joyce Sisson, Sean Twiss, Sarah Allen.

Culture in Marine Mammals?
It is becoming increasingly apparent that culture is an important determinant of behaviour in many large-brained animals. This workshop will examine the evidence for culture in marine mammals, and discuss how cultural processes and their evolutionary and conservation consequences can best be identified and studied.

Date: Wednesday, November 28
More information: http://www.dal.ca/~whitelab/wrkshp.htm

Organizers: Harald Yurk (yurk@zoology.ubc.ca), Luke Rendell (lrendell@is2.dal.ca), Hal Whitehead, Lance Barrett-Lennard.

Pinniped Diet Quantification
The pinniped diet quantification workshop will present new data from captive feeding experiments and focus on the quantitative analysis of scats (from wild populations) to describe diet. Space is limited, therefore interested parties who wish to contribute should please contact the organizers.

Date: Wednesday, November 28
Organizer: Dom Tollit (tollit@zoology.ubc.ca).

Using Pingers to Reduce Marine Mammal Bycatch in Commercial Fisheries
This workshop focuses on recent research and current knowledge about the impacts of pingers on marine mammals and their applicability for reducing marine mammal bycatch in commercial fishing operations. The objectives of the workshop are to identify the uncertainties of using pingers to reduce bycatch, discuss research and research protocols needed to address those uncertainties, and recommend appropriate use of pingers to reduce bycatch.

Date: Wednesday, November 28
Organizer: Emily Hanson (emily.hanson@noaa.gov).

Obtaining a Marine Mammal Scientific Research and Enhancement Permit
Special Evening Information Session
Any person wishing to conduct research on marine mammals in the United States or its territorial waters must have a permit from the National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NMFS). The NMFS's Marine Mammal Permits Division will present an overview of the legislation that governs the taking of marine mammals for scientific research or enhancement purposes, the agencies involved, and the permit application and review process. Biologists and permit analysts from the Marine Mammal Permits Division will be available to answer questions and

give advice on submitting successful marine mammal research and enhancement permit applications.

Date: Saturday, December 1

More Information: http://www.nmfs.noaa.gov/prot_res/PR1/Permits/Biennial_permits.html
Organizers: Tammy Adams (tammy.adams@noaa.gov), Ruth Johnson, Amy Sloan.

Hot Topics in the Realm of Marine Mammal Research

This event will be held at the Vancouver Conference and Exhibition Centre on Thursday, November 29, 7:30-10:00 p.m. and will be open to the General Public and the Media for a nominal fee. There will be presentations by dynamic and controversial Marine Mammal Researchers and Scientists from the Society for Marine Mammalogy's 14th Biennial Conference on the Biology of Marine Mammals. They will give us stimulating presentations on mirror recognition in dolphins, the effect of sonar testing on cetacean hearing, the discovery of a new species of beaked whale in the North Pacific, dolphins - interspecies interaction in the wild: food, fights, fun and much more.

For more information, contact Margaret Butschler butschm@vanaqua.org

Video Presentation

There are two evenings of video presentations planned during the Conference. All those wishing to show a video should contact the Scientific Program Co-Chairs at sciprogram@vanaqua.org. Video presentations should be approximately 10-15 minutes in length, VHS (NTSC) format only. Video presentations must be received by October 31, 2001.

Scientific Program Co-Chairs:

E-mail: sciprogram@vanaqua.org

John K.B. Ford
Marine Mammal Research Program
Pacific Biological Station
Nanaimo, B.C. V9R 5K6
Canada

Andrew W. Trites
Marine Mammal Research Unit
University of British Columbia
Room 18, Hut B-3, 6428 Biological Sciences Road
Vancouver, B.C. V6T 1Z4
Canada
Phone: (604) 822-8181

Special Events

An icebreaker reception will be held at the Vancouver Aquarium Marine Science Centre on the evening of November 28 at 6:30 p.m. This reception is included in your registration fees and additional tickets for guests can be purchased with your registration.

The Society for Marine Mammalogy will have an awards presentation ceremony at the conference. Visit the Society's Web site to view their Awards and Scholarships.

A wrap-up banquet and dance will take place on the evening of December 3 at the Hotel Vancouver. This event is scheduled to begin at 5:30 p.m. Tickets for this banquet are not included in the registration fees and must be reserved separately. Guests are welcome.

Conference Amenities

E-mail at the Conference
A number of computer workstations with Internet connections will be available to conference attendees for checking e-mail.

The 14th Biennial Conference on the Biology of Marine Mammals is sponsored by the Society for Marine Mammalogy and hosted by the Vancouver Aquarium Marine Science Centre. For general questions about the Conference contact: mmconf@vanaqua.org.

Local Whale Watching

Fall is the best time to observe Monterey Bay's greatest marine mammal diversity. 27 species have been recorded in Monterey Bay, at least 20 can be observed in the fall. Check out your local whale watch website for sightings or call for reservations!

Monterey Bay Whalewatch	Monterey Sport Fishing & Cruise
One 4-6 hour trip daily.	Two 3 hours trips daily.
9AM - 2:30PM	10AM-1PM & 1PM-4PM.
Call 831-375-4658	Call 831-372-2203
for information and reservations.	for information and reservations.

LOCAL ACS WEBSITE!!

Don't forget to check out ACS Monterey Bay's website at www.starrsites.com/acsmb/ for interesting information, articles, pictures and links to other cetacean websites.

Many thanks to Webmaster, Evelyn Starr, for maintaining the site.

Recommended Reading

"Tuna - Physiology, Ecology and Evolution"

Edited by Barbara A Block, Hopkins Marine Station, Pacific Grove CA, and E. Donald Stevens, University of Guelph, Ontario Canada.

This book is a multi-disciplinary volume that overviews the most recent literature covering physiology, evolution, biomechanics and ecology of tunas. Recently developed techniques for electronic tagging of fish are presented. Academic Press Book Catalogue.

CALENDAR

Beginning June 2

Oceanic Society Farallon Islands Natural History & Whale Watch Cruises. Summer whale watching season begins June 2 with weekend and select Friday trips to the Gulf of the Farallons, one of the most biologically productive marine environments on the West Coast. Blue and humpback whales have been abundant in past summers and sightings of various dolphin and porpoise species are common. Call 415-474-3385.

October 21-22

24 hour Pelagic Seabird Trip to Davidson Seamount. Join expert seabird naturalist Captain Richard Ternullo and Don Roberson as the 70 foot Sea Wolf II ventures to a site where rare bird and cetacean species have been sighted in recent years. Space is limited, so sign up early. Departs Sunday evening, October 21, and returns Monday evening, October 22. For information call 831-375-4658.

October 27, 9AM-5PM

Moss Landing Marine Laboratory Open House

The open house features hands on exhibits interpreting marine research and touch pools where kids of all ages can encounter live marine creatures. This is a great opportunity to meet faculty and students and learn about their exciting research projects in the Monterey Bay and around the world's oceans.

November 3

24 Hour Pelagic Bird & Whale Watch on the 88-foot Condor, Santa Barbara's premier whale watching vessel. Travel offshore toward Point Conception, beyond the Santa Barbara Channel for a once in a lifetime opportunity to possibly observe sperm, blue, fin, beaked whales, and possibly pilot whales and offshore dolphin species, as well as, late summer and fall pelagic seabirds. $135/person. Contact Captain Ron Hart at 805-896-7489 or e-mail him at 4harts@101freeway.com or Adam at Sea Landing 805-963-3564.

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____State_____Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**

Return to: **Membership Secretary, ACS Monterey Bay Chapter**

P.O. Box HE, Pacific Grove CA 93950 **ACS Chapter: #24**

Calendar (cont.)

Nov. 11 - 16, 2001

"Blubber and Fur: The Whales, Seals and Otters of the Big Sur Coast", Elderhostel : Big Sur Natural History Association, Principal speaker: Esta Lee Albright, Email: estalee@inreach.com
Also, Jeff Norman will present Big Sur history, flora, and Native American lifeways. Magnus Toren will talk about the life and times of Henry Miller. There will be a visit to Pt. Sur Light Station. The Ventana Wilderness Society will give a program about California Condors. Jeff Norman and Jud Vandevere will lead native plant walks near Big Sur Lodge, a field trip to Ventana Wilderness Society and a walk at Andrew Molera State Park. Lodging at Big Sur Lodge 5 nights, meals, activities, programs included. $606.
Daytime only participation also possible. Register by phone or online. See http://www.elderhostel.org
This program and others for Winter 2002 are announced in the elderhostel catalog at the above web site.

November 26-December 6

Moss Landing Marine Lab Fall Lecture Series (831) 632-4400

November 26, 4PM, **"Shark Demography"** presented by Enrique Cortez, Seminar Room, at Moss Landing Marine Labs, Moss Landing CA

November 29, 4PM, **"History of Upwelling along the Northern California Coast from the Shell Geochemistry of Mytilus californianus"** presented by Dr. Ann Russell, University California, Davis, BML Lecture Hall, Bodega Marine Lab, Bodega CA

December 5, 3PM, **"Behavior of Tiger Sharks Along the Hawaiian Archepelago: Reef Resident or Ocean Rambler?"** presented by Chris Lowe, PhD California State University Long Beach Pacific Forum, Monterey Bay Aquarium Reasearch Institute

December 6, 4PM, **"Prehistoric Foragers Along the Northern California Coast: Archeological and Geochemical Evidence from Bodega Bay CA"**, presented by Dr. Michael Kennedy, University of California, Davis BML Lecture Hall, Bodega Marine Lab, Bodega CA

*Nov. 28-Dec.*3

14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconfernce.org (see program information inside this issue of Soundings)

American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950
www.starrsites.com/acsmb/

Soundings

American Cetacean Society ~ Monterey Bay Chapter **Nov - Dec 2001**

The Newsletter of the Monterey Bay Chapter of ACS

AMERICAN CETACEAN SOCIETY - MONTEREY BAY CHAPTER

Monthly meeting at HOPKINS MARINE STATION, Lecture Hall, Boatworks Building

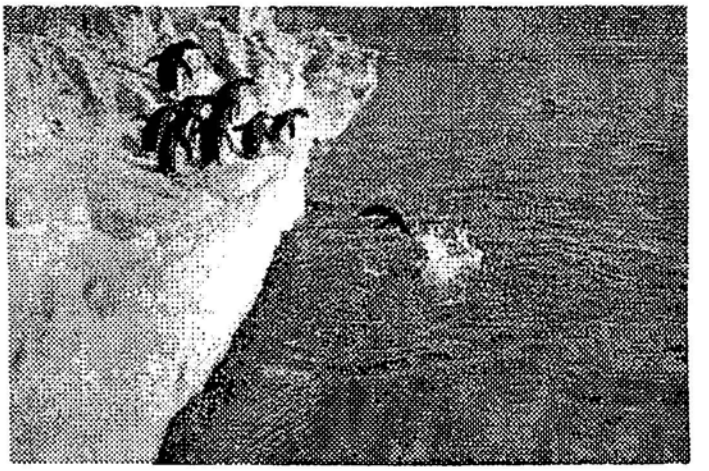
(Across from the American Tin Cannery Outlet Stores)

Date: Thursday, November 29th 2001

Time: 7:30 p.m.

Speaker: Stacy L. Kim, Adjunct Professor, Moss Landing Marine Laboratories

Title: Pollution Ecology in the Antarctic



Penguins Diving (McMurdo Sound)

Antarctica is relatively isolated from human impacts. However, even there we are beginning to see the potential effects of global warming in the calving of gigantic icebergs, and in shifts in krill productivity and penguin foraging behavior. My focus has been more direct: twelve years ago our lab began research on pollutant sources near the largest US base, McMurdo Station in the Ross Sea. The contamination included a marine dump site and a sewage outfall. In such a pristine environment,
how do these two human disturbances impact the marine communities? How have things improved (or not) over the last decade? On the other side of the continent, near the Antarctic Peninsula, bottom trawl fisheries have created significant disturbances on the seafloor. Strict limitations are now regulating the fishery, and last year we initiated a study on the impacts of trawl fishing on benthic communities. How do ecological changes following trawling differ from responses to natural
disturbances like iceberg scour? This talk will summarize the effects of humans in the Antarctic.

Our speaker is a veteran of Antarctic research and is currently preparing for her sixth field season there. She is a graduate of the Moss Landing Marine Labs' Master's program and received her Ph.D. from Woods Hole/MIT.

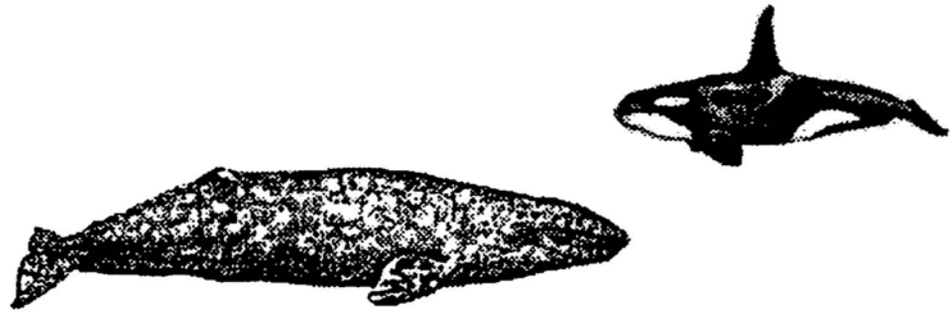
Please join us for a new and thought provoking perspective on this fascinating part of our world.

Above photo: Photo corp2818 from the National Oceanic and Atmospheric Administration/ Department of Commerce Photo Library; Location: McMurdo Sound, Antarctica; Photographer: Dr. Levick.

From the Editor... Tony Lorenz

ACS Monterey Chapter Gray Whale Cruise Set for January 20th, 2002. The 2002 Edition of the Monterey Bay ACS Gray Whale Cruise fundraiser has been set for January 20, 2002, from 7:30AM to 10:00AM with Monterey Bay Whalewatch leaving from Sam's Sportfishing on Fisherman's Wharf onboard the 70 foot Sea Wolf II. The Sea Wolf II has recently been renovated including two new engines, a new generator and a brand new paint job. The boat runs and looks terrific. The trip will be led by expert seabird and cetacean naturalists, Captain Richard Ternullo, Nancy Black and Alan Baldridge.

During the last several winters the peak of the southward gray whale migration has occurred in the third week of January, so we hope our trip coincides with good numbers of gray whales observed. In addition to gray whales, we hope to observe common dolphin and perhaps even killer whales.



DISTRIBUTION AND MIGRATION OF THE PACIFIC GRAY WHALE

Gray whales inhabit shallow coastal waters of the eastern North Pacific. The gray whale makes one of the longest of all mammalian migrations, averaging 10,000-14,000 miles (16,000-22,530 km) round trip. In October, the whales begin to leave their feeding grounds in the Bering and Chukchi Seas and head south for their mating and calving lagoons in Baja California, Mexico. The southward journey takes 2-3 months. The whales remain in the lagoons for 2-3 months, allowing the calves to build up a thick layer of blubber to sustain them during the northward migration and keep them warm in the colder waters. The return trip north takes another 2-3 months. Mothers and calves travel very near shore on the northbound migration. There are some individual gray whales that are found year round in the Straits of Juan de Fuca between the State of Washington and Vancouver Island, Canada and possibly off the central California coast.

NATURAL HISTORY

A migrating gray whale has a predictable breathing pattern, generally blowing 3-5 times in 15-30 second intervals before raising its fluke and submerging for 3-5 minutes. A gray whale can stay submerged up to 15 minutes, and travel at 3-6 miles per hour (4.8-9.6 km/hr). Mothers are very protective of their calves, and earned the name "Devilfish" from early whalers in the lagoons because of their violent defensive behaviors. Orcas (killer whales) are a cause of gray whale deaths, and many gray whales have orca teeth scars on their flukes.

TWENTY-NINTH ANNUAL MEETING
PACIFIC SEABIRD GROUP
20-23 FEBRUARY 2002

Santa Barbara Museum of Natural History,
Santa Barbara, California

MEETING INFORMATION

We are pleased to invite you to attend the Twenty-ninth Annual Meeting of the Pacific Seabird Group (PSG) to be held on 20-23 February 2002 at the Santa Barbara Museum of Natural History in Santa Barbara, California. The meeting will include: oral and poster sessions for contributed papers; Symposium 1: Biology and Conservation of American White Pelicans; Symposium II: Oil and California's Seabirds; and meetings of PSG standing committees and PSG Executive Council. We will include several PSG social gatherings, especially a banquet and dance at the Santa Barbara Maritime Museum in the harbor area. We will make available field trips to visit some of the Channel Islands with associated pelagic birding (i.e., Anacapa, Santa Cruz, Santa Rosa or Santa Barbara islands), California Condors, Salton Sea, and the Western Foundation of Vertebrate Zoology (world's largest egg collection). Additional pelagic birding is also available by personal booking.

Santa Barbara is a beautiful southern California city nestled below the Santa Ynez Mountains with wide sandy beaches along its shores. The world-class Santa Barbara Museum of Natural History has meeting rooms, traditional displays, and extensive research collections. It is located on picturesque grounds in the hills above Santa Barbara and behind the Santa Barbara Mission (founded in the late 1700s). Across Santa Barbara Channel, the four northern Channel Islands beckon you to visit. Other attractions include the Santa Barbara Botanical Gardens, the beach and harbor area (including Stearns Wharf), State Street (for shopping, restaurants, and night life), University of California Santa Barbara, and nearby wine tasting. In nearby Ventura harbor, the Channel Islands National Park also has a visitor center and bookstore at its headquarters.

We suggest that you plan travel arrangements early. Direct air travel is available to the Santa Barbara airport (flights to Santa Barbara are available from Los Angeles, San Francisco, San Jose, Phoenix, Las Vegas, Denver, and Salt Lake City via American, America West, Delta, or United airlines). Taxi service, airporters, or car rentals are available for transport from the airport to hotels. Other options are a one-hour drive from Oxnard/Ventura airport or a two-hour drive from Los Angeles International Airport (LAX). Santa Barbara, Oxnard/Ventura, and LAX have car rentals. There is an airporter from LAX to Santa Barbara: the Santa Barbara Air Bus. The most economical option may be to fly to LAX and take the Santa Barbara Air Bus to and from Santa Barbara. Amtrak stops in Santa Barbara near suggested hotels on the Coast Starlight route, which travels from Seattle-Portland-Sacramento-Oakland-San Jose-Santa Barbara and from San Diego-Los Angeles-Santa Barbara. More details on travel are given later.

The Santa Barbara Museum of Natural History is located at least one half mile uphill from the nearest accommodations and restaurants. Each morning and evening, we will provide free shuttle bus service between selected accommodations (i.e., Radisson and Holiday Inn Express-Virginia Hotel) and the museum. We encourage meeting participants to plan on staying all day at the museum. Inexpensive box lunches will be available for purchase there daily. Short social gatherings (no host bar and light hors d'oeuvres) will be hosted on Wednesday and Thursday evenings but Friday evening will be left free to explore Santa Barbara. Shuttle service will return people back to accommodations and then people should expect to have dinners and evenings at accommodations or in town on Wednesday, Thursday and Friday nights. Shuttle service also will be provided between accommodations and the banquet and dance at the Santa Barbara Maritime Museum on Saturday evening, as well as for some field trips on Sunday. For other transportation around Santa Barbara, the Santa Barbara MTD operates an electric Downtown-Waterfront shuttle and the Santa Barbara Trolley connects with major hotels, shopping areas, and attractions.

Japanese Fleets Begin Whaling in Antarctica
A fleet of five vessels has left from Shimonoseki Port in western Japan and plans to catch about 440 minke whales during a 6 month period the Kyodo News Agency reports. Japan catches hundreds of minke whales each year ostensibly for research purposes. The country gave up commercial whaling in line with an international moratorium in 1986 but has since been carrying out what it calls scientific research whaling since 1987.

Japan Defies Whaling Commission - Begins Dall's Porpoise Hunt
In defiance of a resolution passed by the IWC in London in July 2001 the Japanese whaling fleet began its controversial Dal's porpoise hunt in November 1. At its annual meeting in July the IWC scientific committee expressed extreme concern over the number of Dall's porpoise killed each year. It is the largest direct kill of any cetacean species in the world, with up to 18,000 porpoises killed each year in hand harpoon hunts in Japanese coastal water. It IWC resolution, proposed by the British delegation called for an immediate halt to the Dall's porpoise hunts until a full population estimate has been carried out.

The current abundance estimate is more than 10 years old. Since then more than 130,000 Dall's porpoise have been killed. In addition, substantial numbers have been killed by fishing vessels targeting other species. These do not figure in official statistics.

Japan declined to give the IWC data on the number of porpoises in its waters or those killed. Japanese officials said that the cull took place in Japanese territorial waters and was outside the IWC jurisdiction. Dall's porpoise are named after zoologist who first noted them in the wild, William H. Dall. The IWC first expressed concern about the sustainability of the Dall's porpoise hunt in 1990 when it was revealed that 67% of the estimate Japanese population of the species had been killed in the previous three years.

Fewer Gray Whale Strandings
Pacific gray whales are washing up on shore in unusually low numbers - a sharp turn around from the past two years, when the beach carcass count was unusually high. Marine biologists aren't sure why.

Some whales appear to have had a hard time finding enough food and reproducing in the late 1990s perhaps due to a climate change. This year whales are reproducing at rates far below the decade long averages, but there have been fewer sighting of skinny whales and the numbers of dead stranded whales has plummeted.

In California federal biologists report only 4 strandings this year, compared with 60 last year and 47 in 1999. In Washington and Oregon only one stranding has been reported this year compared with 25 last year and 31 in 1999.
Biologists have lots of theories, but not a lot of information about what's happened in recent years. They say disease and or even chemical contamination can't be ruled out, but most of their research has focused on the whales relationship to food resources.

In 1999 and again last year, some whales appeared skinnier than normal and some strayed farther from their traditional migration routes as if searching for food. Some grays appeared misshapen with bones visible through the skin. Analysis of a few beached carcasses indicated lower than normal levels of lipid fats. The summers of 1998 and 1999 were the key feeding years for the 1999 and 2000 migrations. In both 1998 and 1999 the spring ice was late departing from key areas of the Bering strait according to Wayne Perryman, a federal biologists with the National Marine Fisheries Service. This might have had a dramatic impact on the whales, shortening their feeding season and launching them on their migration in a much weaker condition. In 2000 and 2001 the ice retreated earlier perhaps offering better feeding opportunities.

State of Washington seeks to extend licence to kill sea lions - The U.S. state of Washington's Department of Fish and Wildlife wrote a letter to the federal National Marine Fisheries Service (NMFS) on 12 September requesting a 5-year extension to the state's authorisation to kill predatory California sea lions (*Zalophus californianus californianus*) at the Ballard Locks and Lake Washington Ship Canal. The Department justified the request by saying that while sea lion numbers and predation rates in the area had declined, the winter run of steelhead remained depressed and therefore the Department wanted the ability to kill sea lions if any significant predation on the fish species should re-occur. Public comments on the application should be submitted to NMFS by 19 November 2001. For more information, including

copies of the letter and the related Federal Register entry, see http://www.nwr.noaa.gov/mmamals/Ballard.html. (*Source: NMFS - Downloaded from web site on 30 Oct 2001*) (5 November 2001) (Reprinted with permission)

Alaskan walrus hunters return empty-handed - It was reported on 29 October that native hunters from Dillingham in the U.S. state of Alaska had returned from their annual walrus (*Odobenus rosmarus divergens*) hunt on Round Island having killed no walruses. Two boats containing the hunters could not reach the island, being forced to turn back by high seas, winds over 110km/h, blowing snow and blizzard conditions. One other Bristol Bay community, Clarks Point, killed a walrus earlier in the month, part of the 20 walrus per year quota spread between the local communities, while another community went a week later and returned empty-handed, having only found one walrus in the water. It is thought that the walruses could either be elsewhere feeding or that they have perhaps migrated north early this year. Hunters said that economic factors had also had an effect this year and voiced complaints as to the cost of the hunt and the insufficient level of funding, US$9,000, that they had received from the Eskimo Walrus Commission. (*Source: Fairbanks Daily News-Miner - 29 Oct 2001*) (5 November 2001) *(Reprinted with permission)*

Elephant seals arrive early in California - Nearly 400 Northern elephant seals (*Mirounga angustirostris*) were reported as having come ashore near San Simeon in the U.S. state of California by 18 October, weeks earlier than usual. Scientists do not know whether some factor such as weather or food supplies led to the early arrival, Susan McDonald of Friends of the Elephant Seal (FES) commenting "It's really hard to say. This year, they started coming in the end of August. By October 2, we had more than 100. Last year, we didn't have 100 on this beach until mid-October." A full survey of the seals by docents and scientists will take place in November, assisted by a US$40,000 grant from the state Department of Resources. For more information, contact FES at fes@thegrid.net. *(Source: AP - 19 Oct 2001)* (5 November 2001) (Reprinted with permission)

California sea lion and killer whale observed at Steller sea lion haulout - Scientists from the Alaska SeaLife Center, USA, were interested to observe a female California sea lion *(Zalophus californianus californianus)* hauling out on 2 August on the Chiswell Island Steller sea lion (*Eumetopias jubatus*) rookery 56 km south of Seward. California sea lions are rare in Alaska and the sea lion was only the fourth of its species that researchers have seen on Chiswell since remote cameras were installed there in the summer of 1999. The live feed from these cameras has also allowed the scientists to observe a killer whale (orca) which has been seen patrolling the island off and on since late July. The killer whale is a 30+ year-old transient female that specialises in feeding at sea lion haulouts and rookeries throughout south-central Alaska. The scientists have not yet witnessed the killer whale killing any sea lions over the remote video feed but some of the local tour boat captains have seen her with a sea lion in her mouth. For more information, contact Don Calkins, the Center's Steller Sea Lion Program Manager, at don_calkins@alaskasealife.org. (*Source: Alaska SeaLife Center - 28 Aug 2001*) *(5 November 2001) (Reprinted with permission)*

U.S. Bill rider reverses court decisions on Glacier Bay National Park - A rider attached at the start of October to the 2002 Interior Appropriations Bill by Alaskan Senator Ted Stevens has reversed two court decisions which required an impact study to be carried out before cruise ship traffic could be increased in the Glacier Bay National Park, Alaska (see News Digest, **19 March 2001**). The rider immediately boosts the cruise ship limit from 107 to 139 and maintains the limit at that level for a minimum of two years. Kevin Collins, Director of Government Affairs for the National Parks Conservation Association (NPCA) commented "This is an outrageous disregard for the judicial process, the health of the park, and basic common sense." **SCS Note**: There are concerns at the possible impacts of cruise ship traffic on the park's resources and wildlife, including Steller sea lions (*Eumetopias jubatus*) and harbour seals (*Phoca vitulina richardsi*). For more information, contact the NPCA at npca@npca.org. (*Source: ENS - 12 Oct 2001*) *(5 November 2001) (Reprinted with permission)*

U.S. Government urged to strengthen Marine Mammal Protection Act - Politicians, wildlife officials and non-governmental organisations urged Congress on 11 October to tighten the Marine Mammal Protection Act in order to protect marine mammals from threats such as injuries caused by boaters, commercial fishing nets and Navy sonar equipment. At the hearing held by the House Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans, the Director of the National Marine Fisheries Service (NMFS), William Hogarth, also said that more funding was required in order to provide adequate information on marine mammal species. Mr. Hogarth pointed out that the NMFS is currently only able to study 20 of the 144 marine animals under its jurisdiction. (*Sources: Humane Society of the United States - 11 Oct 2001; Planet Ark / Reuters - 12 Oct 2001*) (5 November 2001) (Reprinted with permission)

Monterey Bay Whale Watch
List of Marine Mammal Sightings in the Monterey Bay Region

October 1 - October 31, 2001

compiled by Richard Ternullo

(Reprinted with permission.)

Note -- In addition to sightings on Monterey Bay Whale Watch trips, this list includes all reported marine mammal sightings for this region. Unusual sightings of other marine animals such as Leatherback Sea Turtles and Basking Sharks are also listed. California Sea Lions, Harbor Seals, and Southern Sea Otters, which are seen on all whale watching trips, are not included in the list.

Date	#	Type of Animal(s)
10/31	5	Blue Whales
	75	Pacific White Sided Dolphins
	300	Risso's Dolphins
10/29	6	Blue Whales
	5	Killer Whales
	50	Pacific White Sided Dolphins
	100	Risso's Dolphins
	75	Northern Right Whale Dolphins
10/28	7	Blue Whales
	4	Killer Whales
	1200	Long-beaked Common Dolphins
10/27	3	Humpback Whales
	12	Blue Whales
	150	Pacific White Sided Dolphins
10/26	5	Blue Whales
	500	Long-beaked Common Dolphins
	30	Northern Right Whale Dolphins
10/25	2	Blue Whales
	4	Killer Whales
	9	Dall's Porpoise
	2	Humpback Whales
10/24		

10/12	12	Blue Whales
	6	Dall's Porpoise
10/11	11	Blue Whales
	7	Killer Whales
	20	Risso's Dolphins
10/10	8	Blue Whales
	25	Long-beaked Common Dolphins
10/9	5	Blue Whales
	800	Long-beaked Common Dolphins
	6	Dall's Porpoise
10/8	6	Blue Whales
	15	Pacific White Sided Dolphins
	50	Long-beaked Common Dolphins
	40	Risso's Dolphins
10/7	7	Blue Whales
	25	Pacific White Sided Dolphins
	150	Risso's Dolphins
	400	Northern Right Whale Dolphins
10/6	250	Pacific White Sided Dolphins
	1200	Long-beaked Common Dolphins
	1000	Risso's Dolphins
	50	Northern Right Whale Dolphins
	12	Dall's Porpoise
10/5	3	Blue Whales
	4	Killer Whales
	1500	Long-beaked Common Dolphins
	35	Risso's Dolphins
	1	Northern Elephant Seal
10/3	1	Blue Whale
	350	Long-beaked Common Dolphins

10/22	100	Pacific White Sided Dolphins
	150	Northern Right Whale Dolphins
10/21	4	Blue Whales
	6	Dall's Porpoise
10/20	2	Blue Whales
	7	Long-beaked Common Dolphins
	3	Dall's Porpoise
10/19	6	Blue Whales
	20	Risso's Dolphins
10/18	1	Humpback Whale
	9	Blue Whales
10/17	10	Blue Whales
	20	Pacific White Sided Dolphins
10/16	5	Humpback Whales
	4	Blue Whales
	175	Long-beaked Common Dolphins
10/15	9	Blue Whales
	150	Long-beaked Common Dolphins
10/14	6	Humpback Whales
	8	Blue Whales
	15	Pacific White Sided Dolphins
	250	Risso's Dolphins
	50	Northern Right Whale Dolphins
	12	Dall's Porpoise
10/13	2	Humpback Whales
	8	Blue Whales
	1	Killer Whale
	1500	Long-beaked Common Dolphins
	150	Risso's Dolphins
	75	Northern Right Whale Dolphins

10/2	8	Humpback Whales
	3	Killer Whales
	500	Pacific White Sided Dolphins
	20	Risso's Dolphins
	1000	Northern Right Whale Dolphins
	1	Northern Fur Seal
10/1	4	Humpback Whales
	30	Risso's Dolphins
	1	Northern Elephant Seal

Bush Administration Working to Roll Back Environmental Protections

While the media and most Americans are preoccupied with Afghanistan, anthrax and the "war on terrorism" the Bush Administration is working quickly to undercut and roll back legislation designed to protect our environment from over exploitation, such as moves to allow road building in national forests, reverse the phaseout of snowmobiles in national parks, make it easier for mining companies to mine gold, copper and zinc on public lands, relax energy-saving standards for air conditioners, bar the reintroduction of grizzly bears in the Northwest, make it easier for developers to eliminate wetlands, and to allow drilling for oil in the Arctic National Wildlife Refuge. Many of the decisions made have been out of the public view and have cited national security as the justification. Senator John Kerry (D-Mass) said the administration's view that oil drilling in Alaska was a matter of national security represented a "false patriotism"..."is a direct effort to capitalize on events"... and "it's a misplaced definition of patriotism to use September 11 as a rationale for doing something that has no impact on price or dependency or immediate supply."

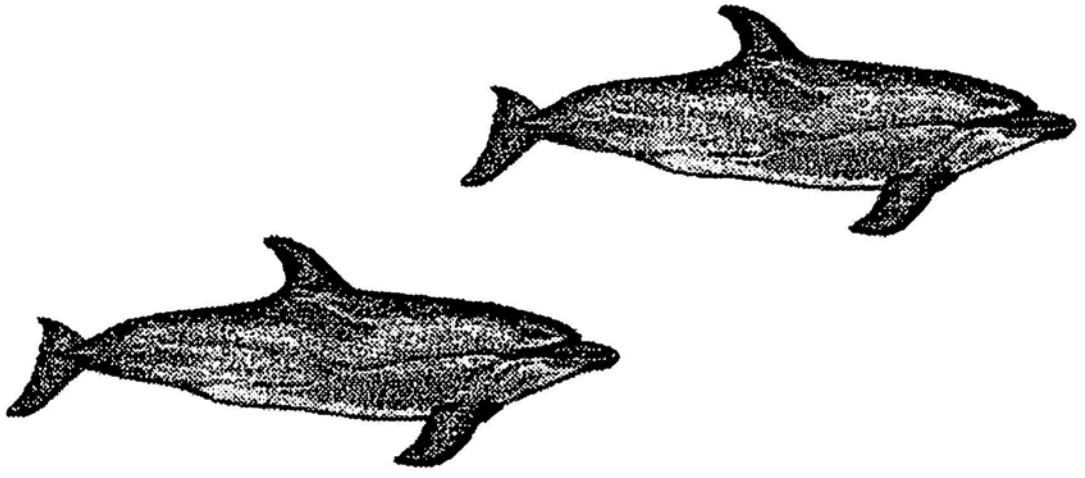
In Memory...

Barbara Britton

Long term supporter of American Cetacean Society National, Barbara Britton, died recently. Ms. Britton represented ACS in both Washington D.C. and at several IWC meetings. Britton's written work on conservation issues appeared in Soundings on numerous occasions. She was incredibly well informed on cetacean conservation issues especially the workings of the IWC and the tuna/dolphin issue. She was a member of the Inter-American Tropical Tuna Commission (IATTC). She was a great lady.

John Lilly

Dr. John C. Lilly, M.D. (1915-2001) is a physician and psychoanalyst specializing in biophysics, neurophysiology, electronics, computer theory, and neuroanatomy. Inventor of The Isolation Tank Method of exploring consciousness. This work led him to interspecies communication research projects between man and dolphin. Timothy Leary praised John as the twentieth century's Columbus, who brought back conspicuous data from the far most inner world journey. Dr. Lilly wrote many books, incuding: Man and Dolphin, The Dolphin in History, The Mind of the Dolphin, Lilly on Dolphins, and Communication between Man and Dolphin.



HAVE A WORD WITH THE U.S. FAROES SEAFOOD DISTRIBUTOR

As you may recall from articles printed previously in Soundings, the barbaric and unnecessary practice known as "the Grind" continues to be carried out annually in the Faroe Islands. International grassroots efforts to end this practice can be successful.

Please speak up for the whales and dolphins by writing:

George J. Davison, Jr., President
Rainbow Seafoods, Inc.
P.O. Box 1345
Gloucester, MA 01931-1945
phone: 978-283-5103
fax: 978-283-3721
office@rainbowseafood.com

Sample letter:

> Dear President Davison,
>
> I am writing regarding distribution by Rainbow Seafoods of fish from the Faroe Islands, the North Atlantic principality of Denmark. This arrangement is irresponsible and even immoral, and should be abandoned immediately.
>
> Massive butchery is practiced in the Faroes in year-round "drive hunts" in which entire families of pilot whales, pregnant females and babies included, are killed indiscriminately. Dolphins are also killed. Several times each year, Faroese fisherman - the people from whom you purchase your product -- drive the Pilot whales and dolphins into shallow bays, where they are butchered with lances, gaffes, and long knives. The suffering endured by these intelligent beings is unimaginable.
>
> The drive hunt is a practice abandoned elsewhere many decades ago, and now outlawed by all other European states. The inhabitants of the Faroe Islands have no subsistence need for whale meat, and much of the flesh is left to rot and dumped; it cannot be exported, as it is polluted with heavy metals and other toxins and therefore cannot meet EU health standards for human food. Still the Faroese have refused to end this bloody tradition.
>
> The five largest food distributors in Germany have suspended their seafood contracts with the Faroe Islands until the Faroese cease the mass slaughter of whales and dolphins. Please join with them and the food importers and chains joining the boycott of Faroese-caught fish. It would be unfortunate if Rainbow Seafoods or its customers were to be targeted for boycott because it refused to end its financial complicity in this barbaric practice.
>
> Sincerely, [YOUR NAME]

Announcement Submitted by:

Kaitilin Gaffney, The Ocean Conservancy
55 C Municipal Wharf, Santa Cruz, CA 95060
(831) 425-1363
(831) 425-5604
kgaffney@psinet.com

Monterey Bay, Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Update Management Plans

For the first time since their creation, the three Northern/Central Coast National Marine Sanctuaries will be updating their management plans, starting this fall.

The public is encouraged to be involved in all phases of the review process.

During the management plan review, each sanctuary will evaluate and possibly revise, their operation and management framework, program areas such as education or research, site-specific regulations, and the appropriateness of boundaries and management zones.

A sanctuary management plan is a site-specific planning and management document that describes the objectives, policies, and activities for a sanctuary.

Management plans generally outline regulatory goals, describe boundaries, identify staffing and budget needs, set priorities and performance measures for resource protection, research, and education programs. They also guide the development of future management activities.

As the first stage of the management plan review process, the sanctuaries will be accepting "scoping" comments from the public through January 31, 2002. Public input during this initial stage will help guide the sanctuaries as they move forward with the management plan review process. This is your chance to tell the sanctuaries what issues are important to you, what you think they are doing well and where you think the sanctuary program can improve.

For more information on how you can become personally involved, please visit the joint management plan website **http://sanctuaries.nos.noaa.gov/jointplan** or contact your local sanctuary office at:

Monterey Bay National Marine Sanctuary
Sean Morton, Management Plan Coordinator
299 Foam Street
Monterey, CA 93940
(831) 647-4217

Email: **sean.morton@noaa.gov**

Gulf of the Farallones and Cordell Bank National Marine Sanctuaries
Anne Walton, Management Plan Coordinator
Fort Mason, Building 201
San Francisco, CA 94123
(415) 561-6622
Email: **anne.walton@noaa.gov**

CALENDAR

Nov. 28-Dec.3
14th Biennial Conference on the Biology of Marine Mammals. Hosted by Vancouver Aquarium Marine Science Center, Vancouver, BC. http://www.smmconfernce.org (see program information inside this issue of Soundings)

Nov. 30, 2001
Galapagos at the Metreon, California Academy of Sciences 7:00PM-8:30PM
Loews IMAX Theatre at the Metreon, 101 Fourth Street, Yerba Buena Gardens, San Francisco. Hear John E. McCosker, Ph.D., Senior Science Advisor for Galapagos, and Curator and Chair of the Academy's Aquatic Biology Department talk about his involvement with this film, and the current state of this fragile island. Tickets are $25 per person and benefit the education and exhibit programs of the California Academy of Sciences. For reservations call the Academy's Development Office at 415-750-7216

November 26-December 6
Moss Landing Marine Lab Fall Lecture Series (831) 632-4400
November 26, 4PM, **"Shark Demography"** presented by Enrique Cortez, Seminar Room, at Moss Landing Marine Labs, Moss Landing CA
November 29, 4PM, **"History of Upwelling along the Northern California Coast from the Shell Geochemistry of Mytilus californianus"** presented by Dr. Ann Russell, University California, Davis, BML Lecture Hall, Bodega Marine Lab, Bodega CA
December 5, 3PM, **"Behavior of Tiger Sharks Along the Hawaiian Archepelago: Reef Resident or Ocean Rambler?"** presented by Chris Lowe, PhD California State University Long Beach Pacific Forum, Monterey Bay Aquarium Research Institute
December 6, 4PM, **"Prehistoric Foragers Along the Northern California Coast: Archeological and Geochemical Evidence from Bodega Bay CA"**, presented by Dr. Michael Kennedy, University of California, Davis BML Lecture Hall, Bodega Marine Lab, Bodega CA

AMERICAN CETACEAN SOCIETY MEMBERSHIP APPLICATION

☐ New Membership/Subscription ☐ Renewal Membership/Subscription ☐ Gift Membership/Subscription

Membership Levels and Annual Dues:

☐ Lifetime, $750	☐ Family, $45
☐ Patron, $500	☐ Active, $35
☐ Contributing, $250	☐ Student/Teacher/Senior, $25
☐ Supporting, $75	☐ Subscription only*, $15/12 issues
☐ Foreign, $45	(*not entitled to membership benefits)

Name:_____

Address:_____

City:_____State_____Zip_____

☐ Check ☐ MasterCard ☐ Visa Credit Card No. _____

Exp.Date_____

Signature:_____

Make checks payable to: **ACS/Monterey Bay Chapter**
Return to: **Membership Secretary, ACS Monterey Bay Chapter**

Calendar (cont.)

December 14, 2002
"Stock recruitment models and the collapse of the Pacific coast ground fishery", Dr. Richard Parish, Moss Landing Marine Lab Seminar Room, 4PM

Through January 2, 2002
Russia's Great Voyages to America 1728-1867, California Academy of Sciences
This beautifully crafted exhibit tells how he Russians first described the West Coast of America to the outside world. Maps and original watercolors of botanical and animal species are featured as well as a scale model of Captain Vitus Bering's ship.

January 20, 2002
ACS Monterey Chapter Gray Whale Cruise Set for January 20th, 2002. The 2002 Edition of the Monterey Bay ACS Gray Whale Cruise fundraiser has been set for January 20, 2002, from 7:30AM to 10:00AM with Monterey Bay Whalewatch leaving from Sam's Sportfishing on Fisherman's Wharf onboard the 70 foot Sea Wolf II. The Sea Wolf II has recently been renovated including two new engines, a new generator and a brand new paint job. The boat runs and looks terrific. The trip will be led by expert seabird and cetacean naturalists, Captain Richard Ternullo, Nancy Black and Alan Baldridge. For information call 831-375-4658.

March 23-24, 2002
8th Annual Santa Barbara Whale Festival
Two fulls days of fun, food, arts and crafts. Marine artists such as Peggy Oki, Bud Bottoms and Pieter Folkens will be present and displaying their work. Call 805-897-3187 or write to P.O. Box 40834, Santa Barbara CA 93140.

Spring 2002
Condor Express to begin whale watching. Captain Fred Benko's new boat, the 72 foot Condor Express will commence whale watching during the Pacific Gray Whale's northward migration sometime in March 2002. The Condor Express will measure 72 '26.5" and carry 149 passengers and 3 crew members and will be able to attain cruising speeds of 30 knots. The Condor Express is planning to stop over in Monterey sometime in January on her way south to Santa Barbara from Washington where she is currently under construction. Fred welcomes everyone in the Monterey Bay community to come aboard to view the new vessel. For more information visit www.allamericanmarine.com or call 805-963-3514.

American Cetacean Society
Monterey Bay Chapter
P.O. Box HE
Pacific Grove CA 93950
www.starrsites.com/acsmb/

Hopkins Marine Station Library
Ocean View Blvd.
Pacific Grove, CA 93950